

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Targeted Health Promotions through the Use of Digital Media

Annika Lo, Kayla Robbins, Matthew Young, Rachel Yiu, Lia Yu

University of British Columbia

KIN 464

Themes: Health, Community, Wellbeing

April 2, 2019

Disclaimer: "UBC SEEDS Sustainability Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student research project/report and is not an official document of UBC. Furthermore, readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Sustainability Program representative about the current status of the subject matter of a project/report".

Executive Summary

The main purpose of this study was to research effective strategies to promote health and physical activity behaviours at the University of British Columbia (UBC) through digital media techniques. This project was conducted in partnership with the Social Ecological Economic Development Studies program (SEEDS). The SEEDS program connects students, faculty, staff, and community partners through various research projects.

A website audit of the UBC Athletics and Recreation dance program was conducted to gauge the current participation of the UBC community and provide recommendations to increase engagement. Through the lens of health promotion and inclusion, data was gathered from students, staff, alumni, and faculty. The purpose of the website audit was to evaluate user feedback from the UBC community on the UBC Athletics and Recreation dance program's website and provide recommendations to improve user engagement and subsequently promote physical activity.

This study utilized a mixed-methods approach through a web-administered survey. The survey was distributed online to reach as many participants as possible and included a summary describing its purpose as well as a consent form (Appendix A; Appendix B). Quantitative data was obtained through the use dichotomous questions and Likert scales. Qualitative data was ascertained through open-ended questions (Appendix C).

Of those who took the survey, 80.3% of participants identified as students, 17.1% identified as staff or faculty, and 3.6% identified as alumni. Quantitative data gathered from the survey are summarised in Appendix D, Appendix E, Appendix F and Appendix G. A sample of

the language utilised on the UBC Athletics and Recreation dance website is included under Appendix H. Avoiding convenience sampling and motivating UBC staff and faculty to partake in the study were noted as challenges. Participant recommendations were gathered through the qualitative data ascertained through the surveys. These included adding more visuals and colour to the website, reducing lengthy text, implementing an online registration option for classes, and designing a site that is mobile friendly (Appendix I; Appendix J; Appendix K). The information reviewed from the current literature and both the qualitative and quantitative data gathered from the survey was used to inform the final recommendations offered to the UBC Athletics and Recreation dance program.

Introduction

In partnership with the SEEDS program, this project primarily aimed to increase participation in physical activity programs within the UBC community by providing recommendations to improve the user experience of the Athletics and Recreation web-page through language, visual texts, and sound. This project collected both quantitative and qualitative data from the UBC community on the Athletics and Recreation dance program webpage to assess its accessibility and current engagement with its services. This paper outlines a literature review conducted on website design, methods and procedures of the study, data analysis, results and discussion of the study findings, and recommendations for the UBC Athletics and Recreation dance program. Data was collected from the UBC community through a survey distributed online through various social media platforms and mailing lists. See Appendix A for the survey summary provided to participants; Appendix B for the consent form attached to the online survey; Appendix C for the online survey; Appendix D for bar charts detailing descriptive

statistics from the data. This project aimed to contribute to the recreational sustainability on campus and encourage both students and faculty members to be more involved in the fitness programs at UBC.

Literature Review

Two pieces of grey literature and two academic articles were reviewed to examine how digital media can be used to facilitate fitness participation. The first academic article was a study exploring the issues of universal accessibility, and the ways in which institutions of higher education can capitalize on their website's utility (DeWaters & Harper, 2008). The second academic article detailed the Australian 10,000 steps program, a low-cost physical activity intervention website intended for large populations at low cost (Davies et al., 2012). By analysing website statistics, Davies et al. (2012) were able to identify specific features that were associated with user engagement. The first piece of grey literature is an informal manual on increasing engagement through effective website design, published by the University of Oxford (2019). The article suggested implementing short but intriguing content, aesthetic images, and analysing audience data through applications such as Google Analytics (University of Oxford, 2019). In the last piece of grey literature, Koyfman (2017) offered five tips to improve online presence and increase customer engagement in her article, "Your Website is Lame" New Year's Resolution Checklist.

The recommendations gathered from these articles are summarised below and categorised by accessibility, engagement, language and visuals, and video and sound. The purpose of this literature review was to identify key elements that would increase website accessibility and

review how these features could be implemented to the UBC Athletics and Recreation webpages to facilitate physical activity engagement among students, staff, and faculty.

Accessibility

Through an electronic qualitative research design on the evaluation of overall accessibility across various institutions' homepage websites, DeWaters and Harper (2008) indicated that most universities' homepages did not comply with the www.worldwideweb.com consortium guidelines. The guidelines include three priorities which need to be met in order for universal accessibility (Chisholm et al., 2001). These three priorities include adding icons that would aid those with colour blindness, adding audio to help in understanding moving images, and adding shortcuts (Chisholm et al., 2001). DeWaters and Harper (2008) stated that website accessibility should be a priority and obligation for institutions of higher education and urged those who are committed to universal accessibility to carefully plan, have an extensive budget, employ periodic web evaluations and maintenance, and set out time and personnel to drive these web-based projects.

Davies et al. (2012) published a study on the Australian 10,000 steps program, a low-cost physical activity intervention website intended for large populations at low cost. The website was reviewed as easily accessible because it incorporated a set of interactive health promotion tools, such as a step counter for users. Through this study, Davies et al. (2012) demonstrated that website usability and practical application were important factors for user accessibility and subsequent physical activity engagement (Davies et al. 2012). Moreover, Koyfman (2017) suggests increasing accessibility by toggling a full sized website on a computer monitor to a tablet-friendly version.

The literature indicates that it may be important for organisations like UBC Athletics and Recreation to budget for additional website features to increase participation in their programs. DeWaters and Harper (2008) stated that implementing icons and visuals create an inclusive experience for users that are disabled and would facilitate physical activity among this demographic. Davies et al. (2012) found that web pages that specifically encourage users to increase their physical activity are successful when they incorporate interactive health promotion tools. Websites that are easily viewed on different devices maximise engagement and are hypothesized to also encourage physical activity among users (Koyfman, 2017).

Engagement

Koyfman (2017) suggested taking time to survey users about their online habits to get a good grasp on their profiles and build the website to suit their preferences. The step program reviewed by Davies et al. (2012) collected website statistics to study and identify the specific components that were associated with user engagement. The study stated that brand recognition was important in participant engagement because users would be more likely to perceive the website as credible.

The University of Oxford (2019) suggests websites must collect data to identify the audiences that frequently visit the site and what they want. Applications such as Google Analytics are inexpensive, determine aspects of websites that facilitate the most engagement, and identify parts of the website that audiences have the most trouble with. This tool was created to help web designers fix flaws on their website, retain audiences, and attract new users (Google, 2019; University of Oxford, 2019). Another strategy to increase website traffic proposed by the University of Oxford (2019) is to explore popular online searches. Adding the most useful and

relevant terms at a given period of time helps websites to reach the top of web searches and attract more users. Useful and relevant terms require web designers to stay up to date with popular trends and update their websites regularly (University of Oxford, 2019).

These pieces of grey literature suggest that data analytics must be employed to increase user engagement. It is implied that user engagement would facilitate utilisation of the websites' services and aid in UBC Athletics and Recreations' endeavour to increase physical activity on campus. It is suggested that keeping up-to-date with trends and regularly analysing data from users will contribute to an increase in the web pages' awareness and possibly increase physical activity participation.

Language and Visuals

The University of Oxford (2019) stated that images must be used strategically to produce aesthetically pleasing pages to attract audiences and facilitate engagement. Images provide audiences with a "first impression" of the website, and by extension, the organisation. Low quality images look unprofessional and show that little effort was given to the design of the page (University of Oxford, 2019). Moreover, audiences have low attention spans and will mostly skim over website content. Therefore, content must be concise and authoritative. This can be achieved by using short but provoking titles, subheadings, and short paragraphs. Providing links within paragraphs tends to be more distracting to users and provides opportunities for users to click away. Consequently, organisations that want to increase engagement of their services should employ short and straightforward messaging on their webpage to increase participation of their services by the UBC community (University of Oxford, 2019).

Video and Sound

Koyfman (2017) suggested uploading engaging content such as videos to websites to increase user traffic. A recent study done by Animoto, a cloud-based video creation service, showed that 80% of millennials used some form of video content when researching a product or service, and roughly 70% were likely to watch a company video when shopping for a product or service (Animoto, 2015). Brightcove, a Boston based software company, additionally pointed out that videos generates 12 times more shares than text and images combined (Templeman, 2017). The UBC Athletics and Recreation dance webpage does not currently features any videos or sound. Suggestions made by Koyfman (2017) may be implemented by setting aside a budget for sound and video creation to be uploaded onto the website and increase user engagement and participation in dance classes.

The key elements detailed in this literature review included website accessibility, user engagement, language and visuals, and video and sound. The significance of these features detailed in the articles were used to inform the methods of data collection and analysis for this study. The overall aim of this study is to aid UBC Athletics and Recreation incorporate these elements to facilitate physical activity engagement among students, staff, and faculty.

Methods

Demographic and Location Rationale

The purpose of this research project was to encourage the UBC community to become more involved with fitness programs. Therefore, the target audience for this project was the entire UBC community, regardless of how frequently they use athletics services on campus. A survey designed to collect both qualitative and quantitative data was distributed online through social media and email to UBC students, alumni, staff, and faculty members.

This survey was made available online and posted on multiple forums that specifically targeted different demographics of the UBC community. For instance, undergraduate and graduate students were targeted by posting the survey on UBC Class Facebook groups. The survey was made available to faculty and staff members through mailing lists (e.g. the Irving K. Barber staff mailing list). These methods of distribution were employed to enable data collection each target demographic (Tokunaga, 2015). Distributing the surveys online facilitated allowed for privacy protection and maximised convenience, as participants were able to remain anonymous and partake in the study at a time and place of their choosing. Distributing the surveys online also ensured that participants did not feel coerced to take part in the survey.

Procedure

The project survey was created through the UBC Survey Tool provided by Qualtrics. Qualtrics is a survey tool that complies with the BC Freedom of Information and Protection of Privacy Act (FIPPA), where survey data is kept secure and is stored and backed up in Canada (Survey Tool, 2019). A mixed methods approach was adopted for data collection: the survey included dichotomous questions and open ended questions that allowed participants to provide longer and more detailed responses (Appendix C). The survey primarily collected data on participants' current knowledge of the UBC Athletics and Recreation dance program, their assessment of user accessibility, and recommendations for the website.

Data collection took place over a one-week period from March 7th, 2019 until March 14th, 2019. A chance of winning a \$10 Starbucks gift card was offered to incentivise participation in the survey. By taking this online survey, participants gave consent to have their

data analyzed. Appendix A outlines the study information; Appendix B presents the consent form that participants viewed upon taking the online survey. To clarify the intent of the study and minimise the effects of confounding variables, a short message was drafted to introduce the study along with the link that was provided to participants (Tokunaga, 2015).

In regards to obtaining participant data for the drawing of \$10 Starbucks gift card, participants were given the option to voluntarily provide their email addresses. These email addresses were stored on a separate document; isolated from the document containing the participants' responses. Unique identifiers were then used in place of the emails. A random number generator, www.random.org, was used to choose a number between 1-74: this determined the winner (True Random Number Generator, 2019). After the gift card was sent by email, all participant emails were deleted.

Data Analysis

Both qualitative and quantitative data were collected and analysed for this study. A free and open-source graphical program called JASP was used for qualitative and quantitative statistical analysis (JASP, 2019). Charts and graphs were created to visually represent the data, to help the audience (e.g. SEEDs, the UBC population, general public) visually grasp the results of the project (Tokunaga, 2015). All charts, graphs, and tables were created through the use of Microsoft Excel, a spreadsheet application featuring calculation, graphing, and various other tools (Microsoft Excel, 2019). To maintain the internal validity of the survey, one question was included in the survey required the participants to explore the webpage. Specifically, participants were asked to find and input the name of a dance instructor into the survey. This question served to maintain the internal validity of the study and ensure participants had spent sufficient time on

the webpage and were able to provide informed answers to the subsequent questions (Tokunaga, 2015). All survey questions are included under Appendix C.

Dichotomous questions and Likert scales were utilised to collect quantitative data on participants' UBC status, prior knowledge of Athletics and Recreation, website accessibility ratings, and website impressions. This data is visually represented in Appendix D, Appendix E, Appendix F, and Appendix G, respectively. Open ended questions were utilised to collect qualitative data, as it provided an opportunity for participants to elaborate further on certain questions (e.g. barriers to physical activity participation, barriers to participation in Athletics and Recreation dance classes, recommendations for the website). The qualitative data was carefully analysed and organised into frequency tables to easily assess the most reported answers (Appendix I; Appendix J; Appendix K).

Results and Findings

A total of 74 participants took the survey: 45 were female, 29 were male. Of the entire sample, 82% were undergraduate students (Appendix D). 69% of participants were unaware of the dance program offered by UBC Athletics and Recreation. Participants that were aware of the dance classes noted that the most common channels of communication were “word of mouth” and “informational media” at the ARC and Birdcoop (Appendix E).

50% of the participants found it extremely easy to navigate the website; this was assessed from a question that required participants to find an instructor's name and a subsequent question asking participants to rank the difficulty of the task (Appendix C; Appendix F). One participant failed to input the name of a dance instructor correctly into the survey. As it is impossible to

identify whether or not this participant had actually visited the website, data collected from this participant was not included in the data analysis. The participant was primarily excluded from the analysis as it could potentially pose as unreliable data (Tokunaga, 2015).

The participant data on first impressions of the visuals on the dance website is represented by the bar chart in Appendix G. This data was ascertained through a Likert scale question on the survey. 30% of participants rated their first impressions of the visuals on the website as “slightly good”. None of the participants rated the visuals as “extremely good”, however one participant rated the visuals “extremely bad”. 71% of participants reported that the visuals encouraged viewers to sign up for dance classes.

73% of participants felt the current language used on the webpage encouraged dance class registration and 70% of participants said there was sufficient written information provided on dance classes to make an informed decision about registration. 85% of participants noted the language and information was straightforward (See Appendix H for language sample).

Participants were asked to choose from a list of website qualities that would most improve the website visuals (Appendix C; Appendix K). The most popular suggestions from participants were to add more photos and videos of the dance classes and to include more colour on the webpage (Appendix J). Most suggestions ascertained by the qualitative open-ended questions were related to the font and text, the current photographs, and the overall layout and organization of the webpage (Appendix J).

Overall, 89% of participants reported they would be more likely to register for dance classes if the website implemented an online booking system. Participants subsequently noted

that an online booking system would make the dance program more accessible, convenient, and efficient (Appendix I). 46% of participants rated cost as a significant barrier to dance class registration.

Discussion

Data Collection and Analysis

In order to distinguish relevant from irrelevant answers, this survey was solely advertised on UBC-sanctioned platforms and mailing groups. This ensured that the survey was advertised to the correct population and minimised accessibility for those not eligible to partake in the study (e.g. people that are not affiliated with UBC). Secondly, the force response selection was utilised on Qualtrics to ensure participants responded to every question on the survey (Qualtrics, 2019). To maintain internal validity, this survey included a question that required participants to visit the Athletics and Recreation dance webpage before answering relevant questions and providing recommendations. If this particular question was answered incorrectly by a participant, their data would not be analysed as it could potentially skew or confound the results. Only one participant was unable to correctly answer the question, and their data was not included in the analysis.

Demographic Responses

In total, this survey received 74 responses. 80.3% of responses received were from participants that identified themselves as UBC undergraduate students, representing a large majority of the participants that took the survey. The high number of responses from undergraduate students may be due to the method of distribution and the incentive. According to Duggan and Brenner (2013), undergraduate students are more likely to use social media and

spend more time on their computers, and were therefore more likely to participate in the survey. Moreover, the incentive proved to be more lucrative than expected, and may have also influenced the high number of responses. Only 17.1% of responses received were from participants that identified as staff or faculty. Utilising mailing lists and public contact information may not have been the most efficient way to distribute the survey to staff and faculty, and a more appropriate incentive could have been used to draw attention to this demographic. The number of responses received from staff and faculty members may have been impacted by the limited amount of time the survey was available for and the relatively little free time this demographic may have, due to the nature of their work. Future studies on this topic should focus on collecting data from staff and faculty, as they represented a minority of responses to this survey.

Participant Responses

This survey ascertained a number of trends among participant responses regarding the UBC Athletics and Recreation dance program. Firstly, most participants indicated the website's language could be improved by removing most of the bulky text and only highlighting simple key messages. Next, participants reported a number of features should be added to help users make informed decisions on classes. Reported features include ratings for classes' difficulty, instructor names and biographies, and participant testimonials. At the time this study was conducted, participants reported that the information posted on the webpage does not seem to be targeted towards staff and faculty members. Moreover, it is not beginner friendly.

Participants reported that user experiences would be enhanced through the implementation of more visuals and colour. Visual examples of different dance classes and settings would not only inform users of certain classes, but would also make the web pages more visually appealing. Moreover, a significant number of participants indicated that the webpages' visuals should be more consistent in terms of spacing, sizes, and quality (e.g. some instructor images were professionally taken while others were lower quality; many images were different sizes). Lastly, participants recommended a few features to increase dance class participation: primarily offering the ability to book classes online, making the mobile site easier to navigate, organising dance classes by genre, and adding a year long calendar with all scheduled dance programs. These features were reported to be especially important to encourage participation and offer more details on classes without necessarily including bulky text.

Challenges and Limitations

The first challenge of this study was to motivate members of the UBC community to voluntarily participate in the study. The survey was time consuming as it required participants to complete several tasks, designed to ensure the UBC Athletics and Recreation Dance webpage had been adequately evaluated. To mitigate this challenge, an incentive was provided: all participants had the option to enter into a draw for a \$10 Starbucks gift card, financed by the research group.

The second challenge was to collect data from staff and faculty members, as they were less likely to be active on UBC social media pages and most likely receive a significant number of emails per day. To mitigate this challenge, mailing lists found on UBC staff and faculty web

pages were utilised make the survey more convenient for this demographic. However, only had 13 participants out of the 74 participants (17.5%) were not categorized as undergraduate students (Appendix D). This posed another challenge to data analysis, because staff and faculty input was necessary to ascertain more externally valid results. Because 82% of respondents identified as UBC undergraduate students, the data is skewed to largely represent this demographic's interests and recommendations for the Athletics and Recreation dance program.

The last challenge was to avoid convenience sampling. The easiest way to advertise the survey would have been through personal contacts. However, this method of advertising would yield biased results (Tokunaga, 2015). Consequently, it is important to use unbiased samples to maintain the internal validity of the study (Tokunaga, 2015). To mitigate this challenge, the research group deterred from utilising personal contacts and instead increased awareness among the general UBC population through methods of impersonal advertising such as through UBC student Facebook groups and UBC affiliated mailing lists. According to Duggan and Brenner (2013), young adults are more likely to use social media than older adults. Therefore, targeting UBC students on social media was the most efficient and effective way to raise awareness.

Recommendations for Athletics and Recreation

This section will detail several recommendations to the UBC Athletics and Recreation program, to help increase health promotion and physical activity engagement among the UBC community. These recommendations were formed based on a review of the present literature on website design and the analysis of both qualitative and quantitative survey data.

The first recommendation, strongly influenced by survey participant data, would be to shorten text and increase visual media (Appendix K). 92% of survey participants that stated that relevant images and videos was the most effective method of highlighting key messages. The University of Oxford (2019) indicated that most audiences have low attention spans and will most likely skim over website content. In contrast, most audiences are more receptive to visual media. Therefore, UBC Athletics and Recreation should decrease the amount of text on their website. The addition of images and videos are also more likely to attract potential customers to participate (University of Oxford, 2019).

A majority of participants noted that there was little consistency between images on the dance program site; images were not formatted to the same size and were of varying quality. Therefore, the second recommendation would be to format images to the same size and use high quality images. The inclusion of these visuals will attract more users and increase participation, as the website will be more professional and aesthetically pleasing (University of Oxford, 2019). Along with the addition of photos and videos, 34 participants also suggested adding more colour to the website.

Next, 89% of the participants stated they would consider signing-up for a class if Athletics and Recreation included an option to register online. This is an important recommendation to consider as Duggar & Benner (2013) reported most young adults (aged 18-30) heavily rely on technology. Most participants reported the ability to register for classes online improves convenience and efficiency (Appendix J and K). Majority of the participants who stated that they still would not register, was due to the fact that they were uninterested in the dance programs offered, or because they are already involved in another dance program

(Appendix I). If UBC Athletics and Recreation decides to implement this booking system, it is recommended to include an instructional video as to how to register for these courses online, to maximize accessibility (Koyfman, 2017).

The next recommendation pertains to increasing participation through website accessibility. Firstly, including instructors' names and biographies to the online dance schedule would allow users to become familiar with instructors and the different genres of dance (University of Oxford, 2019). Additionally, adding provoking titles and subheadings will also increase user engagement and subsequent physical activity participation (University of Oxford, 2019). A few participants also mentioned that the classes did not seem beginner friendly. To mitigate this, adding a section for ratings regarding class difficulty may further inform participants of varying fitness levels. In addition, a significant amount of participants requested specific curriculums for each dance class be posted on the website.

Lastly, UBC Athletics and Recreation should design a more mobile friendly site. Some survey participants noted that it was difficult to navigate the UBC Athletics and Recreation website on their mobile devices. By increasing accessibility by toggling a full sized website on a computer monitor to a mobile-friendly option, this can improve usability on portable devices (Koyfman, 2017). Moreover, these individuals also stated that they frequently book and look-up appointments and classes using their mobile devices. The survey results heavily indicates that a mobile friendly website, or a mobile application for UBC Athletics and Recreation will increase the likelihood of people visiting the website for information. UBC Athletics and Recreation should use an application, such as Google Analytics, to determine aspects of the website that facilitate the most engagement and identify parts of the site that most audiences have trouble

with (University of Oxford, 2019). This will help web designers fix flaws on the website, retain audiences, as well as attract new users (Google, 2019; University of Oxford, 2019).

Future Research

If this study is conducted again, it is recommended to focus data collection on UBC staff and faculty as they are currently under-represented in this study's data set. This population may also have different experiences with technology, therefore providing different suggestions to improve the website (Davies et al., 2012). Additionally, participants were not provided a space to report whether or not they had a disability. As 12.4% of Canadians have a disability, another recommendation for future research would be to focus research to a demographic within a population of individuals who have disabilities. As this population's health implications largely stem from social exclusion, it is important to further delve into this community to break down social barriers while increase accessibility for them (Riazi, 2019).

Lastly, it is also recommended to conduct this survey amongst marginalized individuals at UBC, as this population may benefit the most from physical activity. Marginalized people can be defined as those who are "relegated to a powerless position within a society" (Riazi, 2019). Along with those with disabilities, as discussed in class, a few of the largely marginalized groups of people include women, low income individuals, as well as racialized groups of people. Marginalized individuals report the lowest rates of physical activity (Riazi, 2019). Therefore, it is important to take a look at other confounding variables and research recommendations for improving this demographic's accessibility to physical activity.

References

- Davies, C., Corry, K., Van Itallie, A., Vandelanotte, C., Caperchione, C., & Mummery, W. K. (2012). Prospective Associations Between Intervention Components and Website Engagement in a Publicly Available Physical Activity Website: The Case of 10,000 Steps Australia. *Journal of Medical Internet Research*, *14*(1), e4. doi:10.2196/jmir.1792
- DeWaters, J. & Harper, K. A. (2008). A quest for website accessibility in higher education institutions. *The Internet and Higher Education*, *11*(3), 160-164.
- Duggan, M., & Brenner, J. (2013). *The demographics of social media users, 2012* (Vol. 14). Washington, DC: Pew Research Center's Internet & American Life Project.
- Ghose, A., & Han, S. P. (2011). An empirical analysis of user content generation and usage behavior on the mobile internet. *Management Science*, *57*(9), 1671-1691.
doi:10.1287/mnsc.1110.1350
- Google. (2019). Google analytics overview. *Google Marketing Platform*. Retrieved from https://marketingplatform.google.com/about/analytics/?hl=en_US
- JASP. (2018). Our goals. Retrieved from <https://jasp-stats.org/about/>
- Koyfman, S. (2017). The “your website is lame” new year’s resolution checklist. *Hardware + Building Supply Dealer*, *43*(1), 26-27. Retrieved from <http://ezproxy.library.ubc.ca/login?url=https://search-proquest-com.ezproxy.library.ubc.ca/docview/1862636286?accountid=14656>
- Microsoft Excel (2019). Retrieved from <https://products.office.com/en-ca/excel>

Qualtrics. (2019). CCBPR Validation. Retrieved from

<https://www.qualtrics.com/support/survey-platform/survey-module/editing-questions/validation/>

Riazi, N. (2019). Community based research and health promotion. [Powerpoint presentation].

Retrieved from UBC Canvas

https://canvas.ubc.ca/courses/20419/files/4189088?module_item_id=1071329

Survey Tool. (2019). Overview. Retrieved from

<https://it.ubc.ca/services/teaching-learning-tools/survey-tool>

Tokunaga, H. (2015). *Fundamental Statistics for the Social and Behavioural Sciences*. Thousand

Oaks, CA: SAGE Publications

True Random Number Generator. (2019). Random integer generator. Retrieved from

<https://www.random.org/>

University of Oxford. (2019). Making effective websites. *Public Affairs*. Retrieved from:

<https://www.ox.ac.uk/public-affairs/making-effective-websites?wssl=1>

APPENDIX A.**Survey Summary**

We are currently conducting surveys for UBC Athletics and Recreation in partnership with to the Social Ecological Economic Development Studies program (SEEDS) to improve health and wellness on campus. We are looking to collect data from students, staff, and faculty members to improve accessibility to Athletics and Recreation dance services through website design. This is especially important because the UBC Athletics and Recreation services are included in student tuition fees and are specifically created to fit the health and wellness needs of the UBC community. Your participation in this survey would be greatly appreciated, and you will stand a chance to win a \$10 Starbucks Gift Card! The link is provided below, please feel free to reach out with any questions regarding the study.

Survey Link: https://ubc.ca1.qualtrics.com/jfe/form/SV_a5ER9Pvx3oRoOln

APPENDIX B.**KIN 464: Targeted Health Promotions through the Use of Digital Media Techniques****Participant Consent Form**

Principal Investigator: Negin Riazi

Research Coordinators: Annika Lo, Kayla Robbins, Matthew Young, Rachel Yiu, Lia Yu

KIN 464 Undergraduates at the School of Kinesiology

The purpose of the class project:

To gather knowledge and expertise from University of British Columbia students and faculty members to improve the user friendliness of the UBC Athletics and Recreation Dance Class website. To increase the UBC community's fitness and wellness program engagement by examining health promotion strategies through use of digital media techniques.

Study Procedures:

With your permission, we are asking you to participate in an online survey. With the information gathered, we will critically examine how UBC Activities and Recreation can improve the language, imagery and digital media or content on their website to increase user engagement.

Project outcomes:

The information gathered from the online survey will be part of a written report for the class project. The written report will be shared with the community 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.*

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, this survey 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 an interview is paramount, and no names will be asked for. At the completion of the course, all data (i.e. notes) and signed consent forms will be kept in a locked filing cabinet in Negin Riazi's office in the Population Physical

Activity Lab (2259 Lower Mall) at the University of British Columbia. All data and consent forms will be destroyed one 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. Although there is a schedule of questions, the person taking the survey is free to share what they would like, including refusing to answer specific questions. You should know that your participation is completely voluntary and you are free to **withdraw from the survey** 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, please detail them in the space provided at the end of this survey (question 12).

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 . 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. By completing this survey, you are giving your consent to participate in this survey.

APPENDIX C.

Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time. By completing this survey, you are giving your consent to participate in this survey.

1. I am a(n)

Undergraduate Student (1)

Graduate Student (2)

Faculty Member (3)

Staff Member (4)

Alumni (5)

2. What do you identify as?

Male (1)

Female (2)

Non-Binary (3)

I prefer not to answer (4)

3. Did you know about UBC Athletics and Recreation Dance Classes?

Yes (1)

No (2)

4. If yes, how did you know about the UBC Athletics and Recreation Dance Classes?

The ARC or BirdCoop (1)

Athletics & Recreation Website (2)

UBC Free Week (3)

Word of mouth (4)

Other (5)

5. If Other, Please Specify

6. Please copy the link to your browser to answer the following few questions

<https://recreation.ubc.ca/fitness-classes/programs-classes/dance/>

7. Look for a dance instructor on the website. Please input his/her name below

8. How easy/difficult was it to find the instructor's name? Zero being most difficult, ten being easiest.

0 (0)

1 (1)

2 (2)

3 (3)

4 (4)

5 (5)

6 (6)

7 (7)

8 (8)

9 (9)

10 (10)

9. What was your first impression of the visuals on the website?

Extremely good (1)

Moderately good (2)

Slightly good (3)

Neither good nor bad (4)

Slightly bad (5)

Moderately bad (6)

Extremely bad (7)

10. Does the picture on the website encourage you to sign up for a dance class?

Yes (1)

No (2)

11. Would you be more likely to register for dance classes if you could book them on the website?

Yes (1)

No (2)

12. Yes, because...

13. No, because...

14. What suggestions would you give to improve the visuals on the website? Choose all that apply.

More Photos of the classes (1)

Videos (2)

More colour (3)

Other (4)

Display This Question:

If What suggestions would you give to improve the visuals on the website? Choose all that apply. = Other

15. If Other, Please Specify.

16. Has cost been a barrier in registering for classes at the birdcoop?

Yes (1)

No (2)

“Reduce your everyday stress and discover your favorite style of music to move and groove to! Taught by professional and energetic instructors, the wide variety of dance styles available can help you improve your posture and balance, tone your muscles, enhance your flexibility, and allow you to express yourself in a fun and welcoming environment. Whether you have no

experience with dance, or you've taken a class before, these programs are great for all skill levels! You'll be having such a great time that you might forget you're actually exercising.”

17. Does this language on the website encourage you to sign up for dance classes?

Yes (1)

No (2)

18. Is the language straightforward?

Yes (1)

No (2)

19. Does the website convey enough information about the classes for you to feel that you are making an informed decision when you sign up?

Yes (1)

No (2)

20. Do you feel that the language on the website encourages and targets UBC students, faculty, and staff to participate?

Yes (1)

No (2)

21. What suggestions, if any, would you make about the website?

22. We are giving out one FREE \$10 Starbucks gift card for participating! Please provide your email below if you would like to be included in the raffle for this prize.

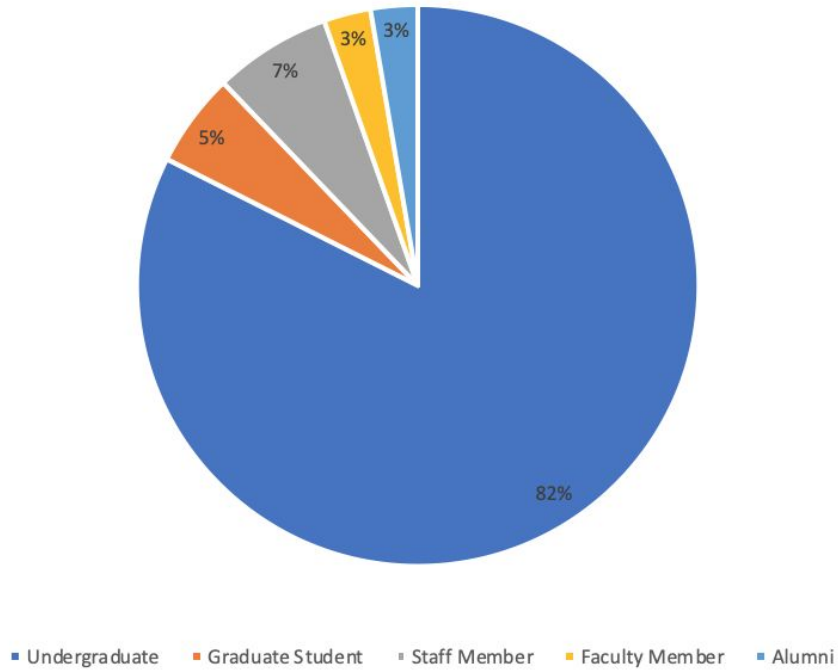
APPENDIX D.

UBC Status

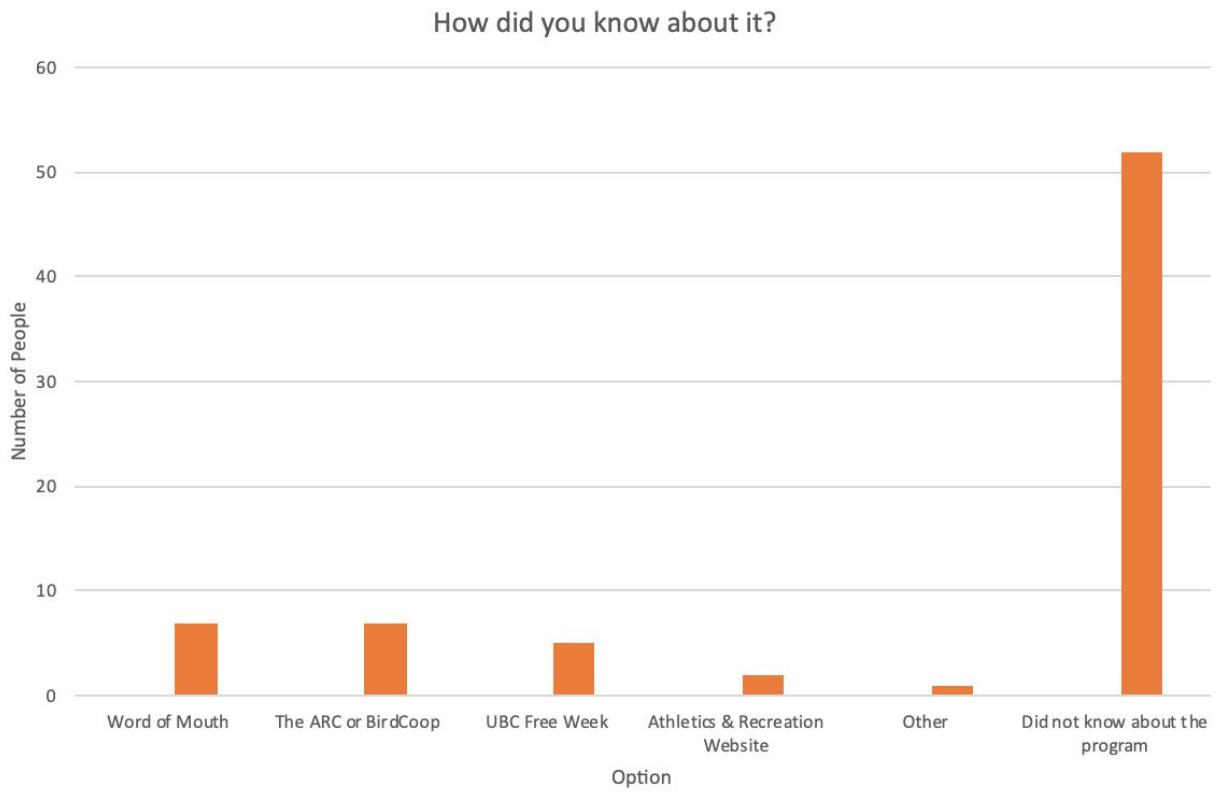
Frequencies for UBC status

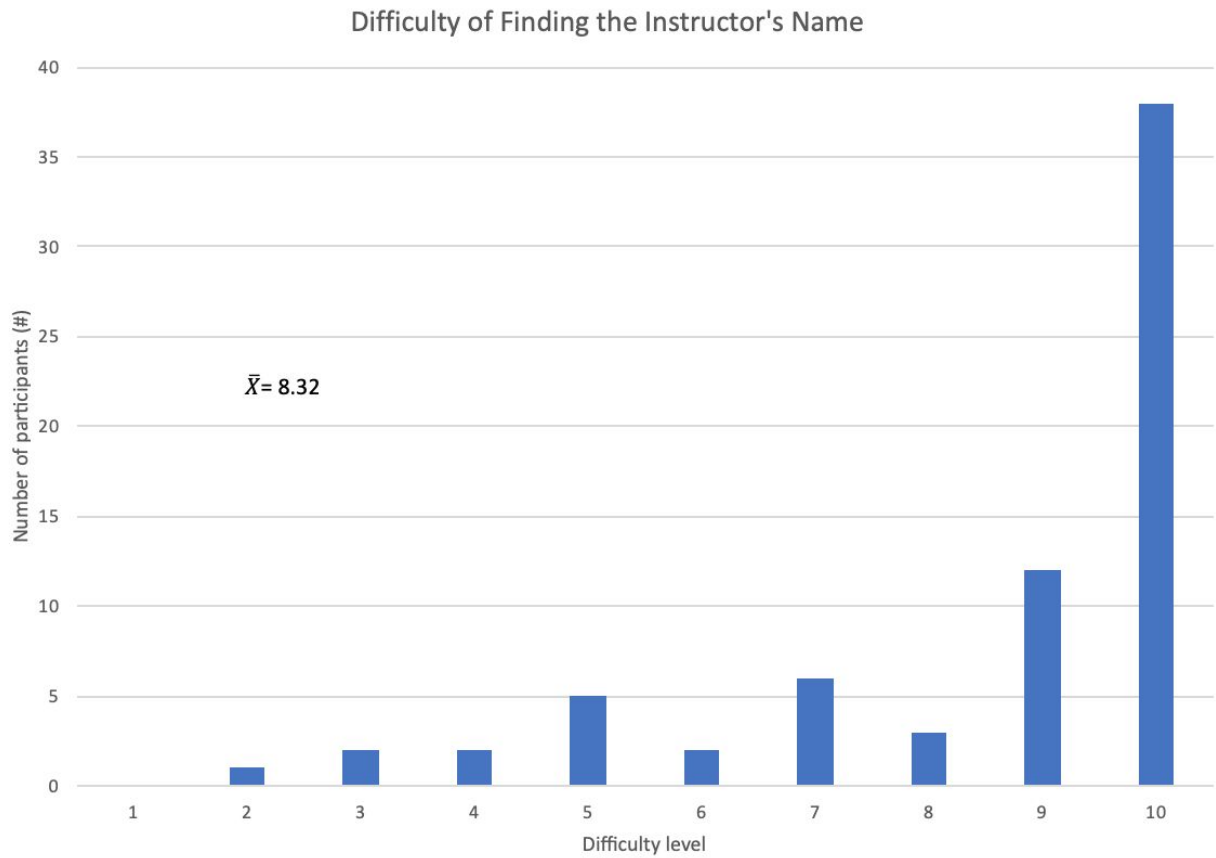
Gender/Sex	UBC status	Frequency	Percent
Female	Alumni	1	2.2
	Faculty Member	2	4.4
	Graduate Student	4	8.9
	Staff Member	5	11.1
	Undergraduate Student	33	73.3
	Missing	0	0.0
	Total	45	100.0
Male	Alumni	1	3.4
	Faculty Member	0	0.0
	Graduate Student	0	0.0
	Staff Member	0	0.0
	Undergraduate Student	28	96.6
	Missing	0	0.0
	Total	29	100.0

Participant Status at UBC



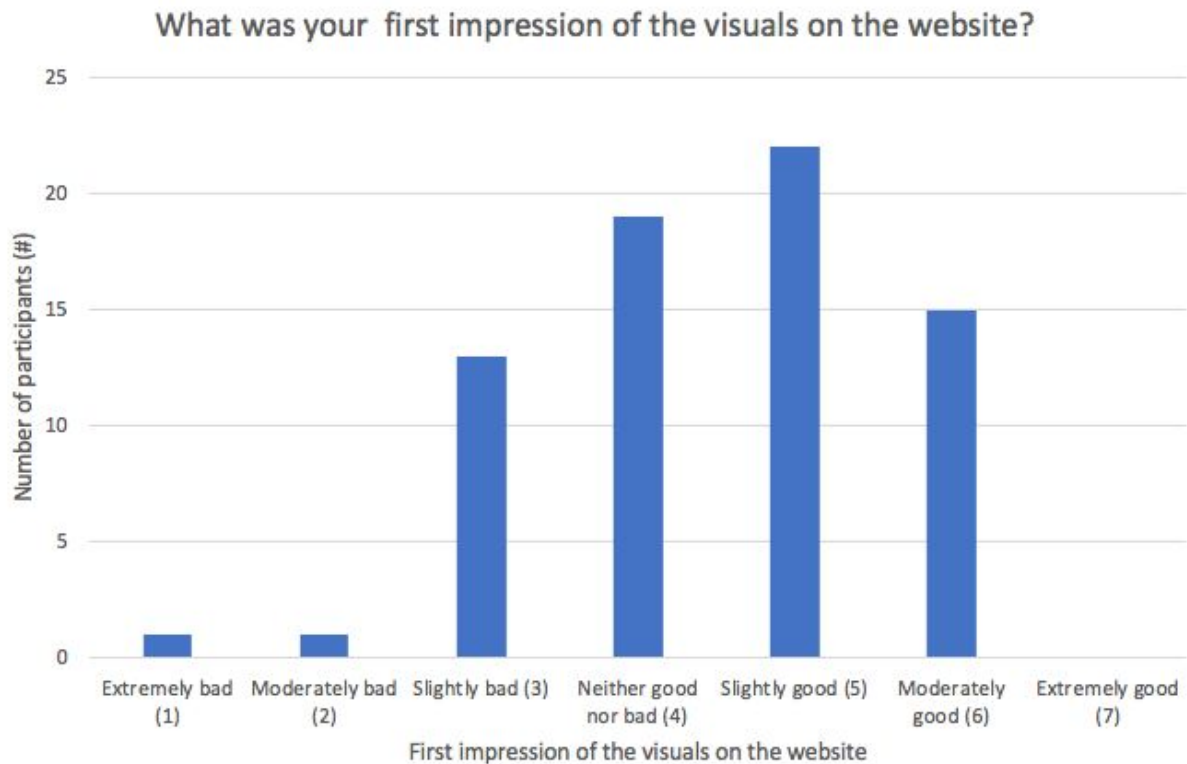
Appendix E.



Appendix F.

*1 = extremely difficult, 10 = extremely easy

The mean response was equivalent to 8.32, extremely positively skewed towards to the “extremely easy” rating.

Appendix G.

Mean (\bar{X}) = 4.48

Ratings of extremely bad to extremely good were given a numerical value from 1 to 7.

The mean response was equivalent to 4.48, or between the “neither good nor bad” and “slightly good” ratings. The overall graph is positively skewed.

Appendix H.*Sample Text*

“Reduce your everyday stress and discover your favorite style of music to move and groove to! Taught by professional and energetic instructors, the wide variety of dance styles available can help you improve your posture and balance, tone your muscles, enhance your flexibility, and allow you to express yourself in a fun and welcoming environment. Whether you have no experience with dance, or you’ve take a class before, these programs are great for all skill levels! You’ll be having such a great time that you might forget you’re actually exercising.”

Appendix I.

Would you be more likely to register for dance classes if you could book them on the website?

Why or why not?

Yes/No	Explanations
Yes, because	Convenience/More efficient Easier It assures that I have a spot in the class/Don't have to risk showing up with a full class Doesn't involve human interaction/Doesn't involve going anywhere Accessibility Option to cancel
No, because	I'm not interested in dance lessons I am involved in the UBC Dance Club

Appendix J.

What suggestions would you give to improve the visuals on the website? Choose all that apply.

Table 2. What suggestions would you give to improve the visuals on the website? Choose all that apply.

Suggestions	Number of Participants
More Photos	6
Videos	9
More Color	4
More Photos of the classes, More colour	8
More Photos of the classes, Other	3
More Photos of the classes, Videos	15
More Photos of the classes, Videos, More colour	19
More Photos of the classes, Videos, More colour, Other	1
More Photos of the classes, Videos, Other	1
Videos, More colour	1
Videos, More colour, Other	1
Other	6

Appendix K.

What suggestions would you give to improve the visuals on the website? Choose all that apply.
Please Specify.

Table 3. What suggestions would you give to improve the visuals on the website? Choose all that apply. Please Specify.

Types of Suggestions	Number of Times	Examples
Font/Text	6	“Different font.” “Headings and text are hard to differentiate.” “Less text per page.” “Shorter descriptions.”
Photographs	5	“Include relevant photo with upcoming classes.” “Better quality photographs.”
Layout/Organization	6	“Organise by type of dancing instead of instructor.” “Simplify information presentation.” “Menu shouldn’t be clumped together.” “Have nicer layout.”