

UBC Social Ecological Economic Development Studies (SEEDS) Sustainability Program

Student Research Report

Targeted Health Promotion Content Analysis

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Themes: Health, Community, Wellbeing

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Final Report

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*We acknowledge that this was written on the traditional, ancestral, and unceded territory of the xwməθkwəyəm (Musqueam) People.

EXECUTIVE SUMMARY

Objective:

To analyze the University of British Columbia's (UBC) boot-camp webpage in order to determine how it can be improved such that it encourages higher rates of participation by students at the University of British Columbia.

Study Design:

This project recruited undergraduate students ($n = 23$) to navigate and experience the University of British Columbia's boot-camp webpage and subsequently answer online survey questions regarding ease of navigability, level of credibility, flow, colour scheme, feelings of sociability, desire to enroll, and visual design appeal. Survey responses were answered using a Likert scale and analyzed via the UBC's Qualtrics survey software where they were given a score out of 5 with 3 considered as a 0 value (neutral). Survey responses were categorized into four thematic categories: navigability and accessibility, website design and content, credibility and informativity, and provided services.

Results:

Of the 23 responses, 54.5% said the website was moderately easy to navigate, 13.6% found it moderately difficult, and 31.9% found the website to be neither easy nor difficult to navigate. The first thematic category: navigability and accessibility (3.49) was scored slightly above neutral while the language accessibility and appropriateness elicited the greatest response from participants (4.21). Website design and content (3.43) was also slightly above neutral with participants stating that feelings of social connectivity and warmth regarding the websites layout

was rated the lowest aspect of this category (2.88). Provided services (3.43) was statistically the same as website design. Participants indicated that the website catered mainly to beginners (3.96), less so to intermediate (3.42), and the least to advanced practitioners (2.92). Credibility and informativity (3.88) was viewed as the strength of the website. The participants agree that the instructors appeared both qualified and knowledgeable (4.00) and friendly and socially inviting (4.21).

Conclusion:

In order to increase student participation by improving the boot-camp webpage, UBC needs to make improvements to navigability, color scheme and visual layout, facilitate social connectivity and warmth through their webpage, and modify the webpage to cater more to advanced practitioners.

The purpose of this paper is to conduct a website audit, through the lens of inclusion and health promotion, of the programs-classes/boot-camp webpage (hereafter referred to as “BC webpage”), a branch of Athletics and Recreation at the University of British Columbia (UBC). Upon completion of the audit, we will provide recommendations to make the website more compelling to students at UBC. Through this work, we will contribute greatly to the UBC Athletics and Recreation goal of encouraging students to engage with recreation programming in order to be more physically active (UBC Athletics & Recreation, 2018). Undoubtedly, website design and content is an important factor that mediates user participation in the service being offered, in this case, bootcamp classes (Carson & O’cass, 2011; Palmer, 2002; Turner, 2017; Skulmowski et al, 2016). Furthermore, it is a vision of UBC Vancouver to be one of the healthiest campuses in Canada and it would be impossible to reach that goal without increasing participation in physical activity (UBC Wellbeing, 2018). This is because regular physical activity is arguably one of the most important predictors of health. In fact, it is associated with increased longevity, chronic disease prevention, improved mental health outcomes, and a greater quality of life (McArdle, 2015). Thus, this work not only contributes to the goals of UBC Athletics and Recreation, and UBC as a whole, but it also improves the health of its students. To this end, we have reviewed the extant literature on the topic which informed our subsequent research and data collection. This project focuses on website design and website content, facilitating flow experiences for users, navigability, webpage colour, audiovisual components, mobile website accessibility, and finally, accessibility for people with and without disabilities.

The literature has clear evidence with regards to website design and content, and their ability to compel users to accept the projected message. Cyr et al. (2018) examined the role of direct route of engagement and peripheral route engagement and their effect on users with

greater prior knowledge versus users with lesser prior knowledge. Direct route engagement most often refers to the quality of argument or main content (Cyr et al., 2018). The quality of argument or main content relates to the actual information on the webpage, which is also corroborated by Wierzbicki's (2018) research. Although content is highly specific to the purpose and general goal of the website in question, Wierzbicki (2018) presents a number of points to improve the perceived credibility of a website by the user, which in turn promotes a sense of trust and increases the perceived information quality. This is bolstered by Cyr et al. (2018), who claims that facilitating trust and credibility allows for a favourable attitude change in the user. Wierzbicki's (2018) proposed checklist contains the following points: (a) make it easy to verify the accuracy of the information on your site, (b) highlight the expertise in your organization and in the content and services you provide, (c) show that there is a real organization behind your site, (d) use restraint with any promotional content (e.g., ads, offers), (e) show that honest and trustworthy people stand behind your site, (f) design your site to look professional (or so it is appropriate for your purpose), (g) make your site easy to use and useful, (h) make it easy to contact you; update your site's content often (at least show it has been reviewed recently), and lastly (f) avoid errors of all types, no matter how small they seem. The concept of peripheral route engagement by Cyr et al. (2018), on the other hand, refers to design elements, social presence, and sense of connectedness. Social presence can be facilitated through images of people, human audio and video content, and socially rich text, which can convey a sense of warmth and sociability to the user (Cyr et al., 2018). Tellingly, it seems there is evidence to suggest that both content and design elements are important in eliciting a positive persuasive response in the user.

In addition, research by Carson & O'cass (2011) points to website flow, which is

mediated by a number of components, as an important factor in website compellability.

Csikszentmihalyi (1997) defines flow as “a perceived state of effortless action, loss of time and a sense that the experience stands out as being exceptional compared to activities in everyday life” (as cited in Carson & O’cass, 2011). Jones (2000) also adds that flow is a perceived harmony between the challenge of the task at hand and one’s abilities (as cited in Carson & O’cass, 2011). The components they speak to are website design, ease-of-use, responsiveness, visual appearance, security features, information content, order fulfillment and delivery (Carson & O’cass, 2011). Through their research, Carson & O’cass (2011) found evidence that supports the idea that the facilitation of a flow experience is compelling for a user, and, conversely, barriers to a flow experience may have negative impacts on the user’s loyalty and decision to purchase (Carson & O’cass, 2011). In sum, the facilitation of flow experience has guided the content of the surveys used in our data collection phase of this project, such that we will make evidence based suggestions of modifications to the existing BC webpage improving its flow, thus making the website more compelling and engaging to participants.

The literature also points to navigation and the incorporation of audiovisual multimedia as important design elements which allow users to acquire information with ease (Palmer, 2002). With regards to navigability, Palmer (2002) speaks to some modifiable aspects such as graphical design, page layout, and content, which allow the user to maneuver effortlessly (Palmer 2002). Furthermore, it seems that navigability is connected to the facilitation of a flow experience (Palmer, 2002). This further corroborates Carson & O’cass’s (2011) research, asserting the importance of flow during an e-service encounter; it also bolsters Cyr et al. (2018) and Wierzbicki’s (2018) aforementioned assertions regarding the importance of user-friendly design. Importantly, the webpage must display an adequate amount of information to allow visitors to

navigate without confusion but must also remain concise in order to avoid overwhelming the users (Turner 2017). Website navigability can also be increased through the homogenization of certain protocols and designs (Palmer 2002). Furthermore, Palmer's (2002) research also points to the impact of incorporating videos into one's webpage. Specifically, the incorporation of multimedia and audiovisual components seem to positively impact users' experiences when viewing a website (Palmer, 2002). Not only does video content convey messages in an informative manner, it also may attract a consumer visually (Palmer, 2002). Thus, audio and visual cues contribute to the overall ease of use, and thus the navigation of the webpage by allowing the consumer to make minimal effort to retrieve information (Palmer, 2002). Therefore, website navigability and multimedia content has been considered in the formation of the surveys for data collection, as per the evidence demonstrating its key role in persuading users.

Furthermore, research indicates that colour plays a vital role in designing a website that captures a user's interest and can also have effects on perceived website usability and trustworthiness (Skulmowski et al., 2016). These factors, as well as adding simple aesthetic appeal, are critical to a webpage's success (Bonnardel et al., 2011). Interestingly, Bonnardel et al (2011) and Skulmowski et al (2016) both assert that the first 50 milliseconds are when a user's impression of a website are formed and can dictate a user's motivation to continue browsing. The same studies suggest that this first impression remains constant for the rest of the browsing time (Bonnardel et al., 2011 & Skulmowski et al., 2016). Accordingly, it is critical that a webpage establishes a favourable first impression, which may be accomplished in part by modifying the colour scheme (Bonnardel et al, 2011). In fact, surveys have demonstrated that grey colour schemes are viewed as trendy and popular among current web designers and users (Bonnardel et al, 2011). Moreover, and particularly relevant to this project, research by Bonnardel et al. (2011)

provides evidence that Canadian populations tend to respond positively to grey colour schemes. Conversely, Skulmowski et al. (2016) suggest that highly saturated webpages decrease perceived trustworthiness and usability. In addition, it seems a website's white space plays a key role in the visual stimulation of its users. White space consists of the areas of the webpage in which there are no visual elements, allowing the user access to a visual resting place (Turner, 2017). In sum, evidence suggests that concise webpages with appropriate white space and a grey colour scheme are conducive to website success, which has informed the provision of several survey questions.

Perhaps the most salient aspect of website design with regard to our main goal is that of user accessibility. The Web Content Accessibility Guidelines 2.0 (hereafter referred to as WCAG 2.0) is a set of guidelines developed by the World Wide Web Consortium, an international web consortium that provides web standards (Schmutz et al., 2018). Using these guidelines, Schmutz et al. (2018) concluded that both disabled and nondisabled individuals benefit from these design elements in both task completion time and satisfaction. It is important to note that these benefits were more pronounced for users of tablets across age groups, and as mobile website use becomes more prevalent, utilizing the design guidelines of the WCAG 2.0 will appeal to a broader base of users across platforms (Schmutz et al., 2018; W3C, 2008). Ensuring that the BC webpage is optimized for all age groups, platforms, and levels of ability, can only act to broaden its reach and further the interest of the student body in recreation participation.

In sum, research regarding website design and website content; facilitating flow experiences for users; navigability and videos; webpage colour; mobile website accessibility; and finally, accessibility for people with and without disabilities were paramount in developing the following phases of this project. With this background in mind, we were able to take an

evidence-based approach to the audit of the BC webpage, the formation of surveys that were provisioned to students at UBC, and lastly, the resultant recommendations to UBC Athletics and Recreation on how to make their BC webpage more enticing to prospective users.

Rationale

A cursory glance at UBC's Athletics and Recreation's BC webpage will reveal a number of shortcomings based on the aforementioned features of a compelling webpage, discussed at length in the introduction and literature review. However, to offer suggestions to UBC Athletics and Recreation solely based on these comparisons would be conservative at best and irrelevant at worst. Thus, we have collected data from prospective users of the BC webpage, in order to evaluate the lived experience of the target demographic as they navigate this webpage. With regards to the selection of our demographic, students at UBC were chosen for a number of reasons. First and foremost, they are one of the main demographics that UBC Athletics and Recreation would like to increase engagement with (personal communication, Olivia Yung, January 15, 2019). Second, it seems that British Columbians spend 50%-70% of their time in sedentary pursuits, which increases their risk for diabetes, obesity, heart disease, and a myriad of other health complications (Ministry of Health, 2015). Third, it seems that university students are at a high risk of physical inactivity, and less likely to engage with programs offered, as compared to the rest of the population (Haase, Steptoe, Sallis & Wardle, 2004). Olivia Yung, an administrator at UBC Athletics and Recreation, echoes this sentiment: expressing concern that students are not utilizing the recreation services offered, despite these services being offered to students at a nominal fee (personal communication, Olivia Yung, January 15, 2019). This further solidifies our group's choice to focus on this demographic, specifically, students at UBC.

Methods

The participants in this project included students studying full time at the undergraduate level at the UBC Vancouver Campus. Not only is this demographic one of the main targets of the BC webpage, it also presents an accessible sample because the administrators of this project are also full-time undergraduate students at UBC. Additionally, undergraduate students make up the largest percentage of the UBC population at approximately 79% of the population (UBC Overview and Facts, 2018). Several participants were selected by each of our five group members for a total of twenty-three participants (n=23). Participants were acquired by way of convenience sampling, in order to increase the likelihood of engagement with the survey (Kowalski, McHugh, Sabiston, & Ferguson (2018). We chose this method of sampling because the provisioned survey takes a minimum of ten minutes and there is no incentive offered for completion, which may have presented a deterrent to participants (Kowalski et al, 2018). Therefore, the investigators were able to purposively select participants, which increased the likelihood of survey completion, as evidenced by our number of participants.

In order to assess the current level of accessibility, navigability, and design appeal of the BC webpage, it was imperative to collect feedback that would shed light on users' current experience on the BC webpage. Thus, to assess the aforementioned criteria, we conducted an online user experience survey. We chose this avenue because evidence suggests by asking straightforward questions, surveys prove a reliable instrument for data collection, analysis and interpretation in order to make inferences from a sample to a population; not to mention that due to its ubiquity, administering a survey and completing one are done with ease (Kowalski et al, 2018; Fink, 2003). Furthermore, the online platform is especially useful for students, as research shows that students are more likely to engage with quick online surveys as opposed to in person

interviews (Wharton et al, 2003). Each group was divided into two categories, the group on PC/laptop had fifteen participants (n=15) and the group that completed the survey on a mobile device contained eight participants (n=8). The beginning of the survey prompted each participant to navigate to the BC webpage and to find a bootcamp class that interests them and fits with their schedule. Following the complete BC webpage experience, each participant was asked to answer a series of questions on a 5-point Likert-type Scale to describe their impression of the BC webpage on factors including: ease of navigability, level of credibility, flow, colour scheme, feelings of sociability, desire to enroll, and visual design appeal (for a complete list of criteria and questions refer to appendix A). The Likert-type scale format provides a useful and simple method to quantitatively measure survey responses, and was therefore used, due to the need to collect quantitative data of specific opinions, attitudes, and beliefs regarding the webpage's design for all the criteria (Johns, 2010). The Likert-type scale responses were individualized to each question (rather than based on a strict agree/disagree scale) in order to prevent acquiescence bias—a bias promoting agreeance of the interviewee with the questioner (Upton & Cook, 2014). This survey was designed with the intent to illuminate the perceived shortcomings of the BC webpage by its users, the Likert-type scale giving them the chance to not only express positive attitudes towards an aspect of the webpage, but also negative attitudes, if present (Johns, 2010). Each investigator recruited multiple participants by reaching out to fellow classmates by way of email or via social media messaging with a link to a UBC Qualtrics survey. The email was sent out to prospective participants on March 14, 2019 and participants were required to complete the survey by March 20, 2019. An explanation of the project was included along with an emphasis that participation is completely voluntary. This project has received approval from the ethics board by way of its affiliation with Kinesiology 464: Health Promotion and Physical Activity

(personal communication, Negin Riazi, January 15th, 2019). Accordingly, the beginning of the online survey included the disclaimer which stands in place of signed formal consent sheets (see Appendix B).

Data Analysis

The initial sample size consisted of 24 participants (n=24). One person failed to complete the survey and therefore the responses of 23 people were collected and analyzed.

The Likert-scale survey responses were arranged from lowest to highest in regards to success of the webpage in each category, and were assigned a numerical value from 1-5. 1 is indicative of a poor performance while a 5 is indicative of an excellent performance. A score of 3 is considered a neutral response. The scores from each participant for each individual question were combined and averaged then were thematically analyzed (refer to Appendix B). Survey responses were then condensed into four thematic categories: navigability and accessibility, website design and content, credibility and informativity, and provided services (refer to Appendix B).

Results

15 participants accessed the UBC recreation website through a computer/PC, while 8 accessed the website through a mobile device. Out of 23 participant responses, 54.5% said the website was moderately easy to navigate, 13.6% found it moderately difficult (the remaining 31.9% found the website to be neither easy nor difficult to navigate).

Q31: On what devi...	Count	Percent	Cumulative
Computer/PC	15	65.2%	65.2%
Mobile device/cell p...	8	34.8%	100%
Total	23	100%	

Although not statistically significant, 25.0% of those who accessed the website through a mobile device (n=8) found it extremely easy to navigate, 62.5% found it to be easy to navigate, and 12.5% found it moderately difficult. 21.4% of those who accessed the webpage through a computer/PC (n=15) found it to be extremely easy to navigate, 50.0% found it moderately easy, and 14.3% found it moderately difficult (the remainder 14.3% of people found it neither easy nor difficult).

Q31: On what device did you access the UBC recreation website—a mobile device or a co...				Total
Q1: How easy is the web...	Computer/PC	Mobile device/cell phone		
Moderately easy	50.0%	62.5%		
Extremely easy	21.4%	25.0%		
Moderately difficult	14.3%	12.5%		
Neither easy nor difficult	14.3%	0%		
Total	100%	100%		

The website scored the highest, on average, in website credibility (4.25) (for a full list of averaged survey response scores please refer to Appendix B), feelings of friendliness and social invitedness (4.21), and language accessibility (4.21).

The website scored the lowest, on average, in invoked feelings of social connectivity and warmth (2.88), and catering to experienced/advanced practitioners (2.92). Ease of navigability, although scoring above neutral on the Likert scale (3.63), should still be seen as a dissatisfactory score, as navigability is a core component of any webpage experience.

Navigability and accessibility overall obtained a 3.52.

Within this category, the language accessibility and appropriateness elicited the greatest response from participants (4.21)

Website design and content obtained a 3.43

Within this category, feelings of social connectivity and warmth regarding the websites layout scored the lowest (2.88). Further, some people did not feel that the website's layout and colour-scheme provided a visually relaxing atmosphere (3.13).

Credibility and informativity obtained a 3.88

Overall, students found the website to be credible (4.25). The participants also agreed that the instructors seemed qualified and knowledgeable (4.00) and that they seem friendly and socially inviting (4.21).

Provided services obtained a 3.43.

Participants thought that the UBC boot camp classes catered mainly to beginners (3.96), less so to intermediate (3.42), and the least to advanced practitioners (2.92).

Discussion

The results from the user surveys illuminate the shortcomings and strengths of the BC webpage. Major areas of strength were identified as website credibility, feelings of friendliness and social invitedness, and language accessibility. In contrast, the BC webpage was found to be sub par in navigability; low in invoking feelings of social connectivity and warmth; low in colour

scheme and visual layout; and low in catering to experienced/advanced practitioners. Mobile users found the webpage easier to navigate than their PC/laptop-using cohorts.

Especially salient is the modest score on ease of navigability. As mentioned in the literature review, navigability is a modifiable aspect of webpage design that has implications for the compellability of a webpage (Carson & O'cass's, 2011; Cyr et al, 2018; Palmer, 2002; Turner 2017; Wierzbicki, 2018). What's more, Carson & O'cass's (2011) research demonstrates that navigability is an important aspect of facilitating a flow experience for the user, yet another connected criterion of a compelling webpage. While the results may not appear to be extremely unfavourable, their trend toward neutral may be a cause for concern. This is because it may be argued that website navigability is a key feature of any webpage and a score closer to 100% should always be the goal (Palmer, 2002).

In terms of the low score on lack of sociability and warmth, the BC webpage's modest score may point to a lack of images of people, human audio and video content, and socially rich text (Cyr et al., 2018).

With regards to the low score on colour scheme and visual layout, it is possible that the blue, grey and white colour scheme of the BC webpage was not viewed favourably by participants. This is garnered from the evidence in the literature review that suggests that grey colour schemes are viewed as trendy and popular among Canadians in general, current web designers and users (Bonnardel et al, 2011). In addition, it is possible that the BC webpage is lacking in adequate white space, which allows users to access to a visual resting place (Turner, 2017). These unmet criteria for optimal colour scheme and visual design may be a possible explanation for these results.

With regards to catering most to beginner practitioners and less to advanced practitioners, this is particularly valuable information for UBC Athletics & Recreation because one of their administrators expressed this exact concern which is now supported by data from their target demographic (personal communication, Olivia Yung, January 15, 2019). It is possible that more experienced practitioners do not see themselves represented in the models chosen which may contribute to the perception that the bootcamp classes cater least to this demographic nor are the class descriptions adequate to entice them (HuffPost Canada, 2018).

In sum, the above are the most salient points that we garnered from the results and may speak to the experience of the population of UBC undergraduate students as they attempt to navigate and use the BC webpage. Thus, the recommendations will be based on these discussion points.

Limitations

Offering recommendations to the UBC Athletics and Recreation department on how to improve their BC webpage did not come without its challenges. Specifically, we saw the following challenges in carrying out our project: challenges with developing evidence based web-design recommendations, sampling error, research bias, limitations of surveys, limitations of likert-type scales, participant motivation, and participants competency with technology.

Firstly, Evans (2000) points to the lack of systematic guidelines on what does and does not constitute a compelling website, which compromises the guidelines and results in a myriad of divergent ideologies that are not free from control bias and subjectivity. Case in point, there are more than 30 sets of web design guidelines on usableweb.com (Usable Web, 2018). One might argue that Evan's (2000) observation was made nearly twenty years ago, however, in our experience of both the grey literature and the peer reviewed literature available, there are great

disparities and different emphases on what features one should focus on when developing a compelling webpage. Therefore, due to the lack of a systematic approach on what does and does not constitute a compelling website, it will be impossible to guarantee that the resultant recommendations from this project are free of subjectivity and bias; not only from the literature, but also from the bias of the investigators, because we had to glean what seemed most salient and none of us have a background in web design. In order to address the lack of systematic guidelines available for web design, we emphasized the results garnered from the survey when formulating recommendations to UBC Athletics and Recreation. This ensured that the resultant recommendations are based on their target demographic, rather than broadly on recommendations garnered from the literature.

Secondly, random sampling error is an important consideration regarding the challenges of this project. Random sampling error is encountered when the sample selected is not a perfect representation of the test population. Moreover, sampling error is a greater concern as samples get smaller, as there is less likelihood that fewer persons represent the population as a whole (Assael & Keon, 1984). However, due to feasibility and time constraints, we were forced to use convenience sampling. With convenience sampling comes the potential presence of selection and response biases. Since the convenience sample was drawn from UBC students alone, it seems reasonable to assume that those participants would have previous experience in exploring UBC webpages. Perhaps more accurate results could have been garnered had the users been new to the UBC website. Furthermore, because the administrators are themselves UBC students, same as the participants, the likelihood of acquiescence response bias is increased. Thus, the possibility that our sample is not representative of the general population must be considered when interpreting the results of this report. It should also be noted that there was confusion regarding

the webpage, where participants had the perception that the BC webpage that they were navigating had been created by the administrators themselves. This may have caused the responders to give answers in favour of the BC webpage, resulting in scores that reflected more positively on the webpage. In future studies, administrators should ensure: random sampling, a larger sample size, and an emphasis on objectivity in survey directions such that the participants are not acquiescing.

Third, the use of a 5-point Likert scale is somewhat limited, which presented a challenge for this project. While Likert scales provide responses on a spectrum, the responses must be in linear progression and participants' opinions and beliefs may fall between or beyond the offered options (Bishop & Herron, 2015). Future studies should consider a mixed methods design whereby a survey is used in conjunction with qualitative interviews.

Fourth, despite our best efforts, some participants did not complete the surveys by the prescribed deadline, and it is possible that they did not provide quality responses due to a lack of interest in the material. In fact, Bosnack & Tuten (2001) assert that lower response rates are particularly likely if there is no incentive offered. Given that the parameters were already in place for this project, we were unable to provide incentive, and one may argue the subject matter of our surveys was not the most engaging. Furthermore, while our demographic is likely proficient when operating laptops and mobile devices, another potential barrier to survey completion is cumbersome online software (Bosnjak & Tuten, 2001). This issue was extremely prevalent in our data collection as there were numerous occasions where a participant would begin the survey then exit or submit before completing it fully. This resulted in a lack of usable data that had to be eliminated to avoid skewed results. Some participants struggled with using the UBC survey software and that potentially impacted the results. In an effort to remove any delays

or omissions, a reminder email was sent three days prior to the due date, to any participants who had not completed their responses in full. Nonetheless, future studies should consider offering an incentive to mitigate a lack of data and a lack of usable data.

Recommendations

In terms of the recommendations for UBC Athletics and Recreation, we would like to suggest four changes to their BC webpage based on the project results. Namely, improvements to navigability, facilitating social connectivity and warmth through their webpage, modifying the webpage to cater more to advanced practitioners, and improving color scheme/ visual layout.

Firstly, the navigability of the webpage may be increased through the homogenization of certain protocols and designs. Specifically, graphical design, page layout, and content, which allow the user to maneuver effortlessly (Palmer 2002). We recommend that UBC Athletics & Recreation hire a web designer with the expertise to modify these aspects of their webpage.

Secondly, because the data collected from the target demographic points to a perceived lack of sociability and warmth, we suggest that UBC Athletics & Recreation implement additional images of people, add human audio and video content, and include more socially rich text. This aligns with Cyr et al's (2018) research, pointing to those elements as routes to increase perception of sociability and warmth.

Thirdly, since the data points to a lack of the BC webpage's ability to compel advanced bootcamp practitioners, we suggest including more diversity in the bodies that are represented and also being more explicit with the language used to describe the advanced bootcamp classes. Body positive trends in marketing have been very popular in recent years as corporations begin to realize that not only does representation matter, it also boosts sales. This is because seeing body's that resemble one's own elicits a persuasive response in the consumer (HuffPost Canada,

2018). Therefore, in order to impart the impression that the BC webpage has classes for advanced practitioners, we would like to suggest making two changes: first, including a wider range of body types in the images and/or videos and second, that explicit language be used to describe classes that are more advanced. However, we would like to caution against homogenizing any of the images/video with regards to body type, especially when it comes to representing more muscular bodies, as that might be alienating to those that do not fit this ideal or those that are less experienced. Ultimately, diversity in the representation of models is paramount (HuffPost Canada, 2018).

Finally, since it consistently received a low score, the webpage colour scheme and layout should be improved. These will also fall in tandem with the previous suggestions but improving simple aesthetic appeal via colour scheme and layout play a vital role in capturing users interest, and can also have effects on perceived website usability and trustworthiness (Skulmowski et al., 2016; Bonnardel et al., 2011).

Appendix A

This survey will focus website design and website content, facilitating flow experiences for users, navigability, webpage colour, audiovisual components, mobile website accessibility, and finally, accessibility for people with and without disabilities.

Survey Questions					
On what device did you access the UBC recreation website—a mobile device or a computer?	Mobile Device/ Cell phone	Computer/PC			
How easy is the website to navigate?	Extremely difficult	Moderately difficult	Neither easy nor difficult	Moderately easy	Extremely easy
Is the experience fast and efficient?	Extremely slow and inefficient	Moderately slow and inefficient	Neutral	Somewhat fast and efficient	Very fast and efficient
Does the website invoke feelings of social connectivity and warmth?	Not at all	Not really	Neutral	Somewhat	Very
Does the website seem credible?	Not at all credible	Somewhat not credible	Not sure	Somewhat credible	Very credible
Is the website colour scheme appealing?	Not at all appealing	Somewhat appealing	Neutral	Somewhat appealing	Very appealing
Is the website text colour and size easily readable?	Not at all readable	Somewhat unreadable	Neutral	Somewhat readable	Very readable
Are classes easy to navigate to?	Extremely difficult	Moderately difficult	Neither easy nor difficult	Moderately easy	Extremely easy

Are class descriptions clear and informative?	Not at all clear nor informative	Somewhat unclear and uninformative	Neutral	Somewhat clear and informative	Very clear and informative
Are classes easy to choose from?	Extremely difficult	Moderately difficult	Neither easy nor difficult	Moderately easy	Extremely easy
Are class times and dates easy to navigate to?	Extremely difficult	Moderately difficult	Neither easy nor difficult	Moderately easy	Extremely easy
Are class times and dates easy to view and understand?	Extremely difficult	Moderately difficult	Neither easy nor difficult	Moderately easy	Extremely easy
Does the website appear professional?	Very unprofessional	Moderately unprofessional	Neither professional nor unprofessional	Moderately professional	Very professional
The website was easily accessible through a mobile device	Very difficult	Somewhat difficult	Neither easy nor difficult	Somewhat easy	Very easy
Accessibility through a mobile device was the same as through a computer device	Not at all the same	Somewhat unsimilar	Not sure	Somewhat similar	Very similar
The website's different pages flowed well into one another	Not at all	Not really	Neutral	Somewhat	Very
Is the instructor webpage easy to navigate and understand?	Extremely difficult	Moderately difficult	Neither easy nor difficult	Moderately easy	Extremely easy
Do the instructors seem qualified and knowledgeable?	Not at all qualified	Somewhat unqualified	Not sure	Somewhat qualified	Very qualified

Do the instructors seem friendly and socially inviting?	Not at all friendly and inviting	Somewhat unfriendly and uninviting	Not sure	Somewhat friendly and inviting	Very friendly and inviting
Do you get the impression that boot camp classes at UBC cater to beginners?	Not at all	Not really	Neutral	Somewhat	Very much so
Do you get the impression that boot camp classes at UBC cater to somewhat experienced/intermediate practitioners?	Not at all	Not really	Neutral	Somewhat	Very much so
Do you get the impression that boot camp classes at UBC cater to very experienced/advanced practitioners?	Not at all	Not really	Neutral	Somewhat	Very much so
Were the instructor images a helpful aid for class selection?	Not at all helpful	Somewhat unhelpful	Neither helpful nor unhelpful	Somewhat helpful	Very helpful
Are the images on the webpage appealing/arouse interest?	Not at all appealing	Somewhat unappealing	Neutral	Somewhat appealing	Very appealing
Did the images provided on the website give a clear indication of potential class structure?	Not at all	Not really	Neutral	Somewhat	Very much so
Does the webpage's layout/colour provide a visually relaxing atmosphere?	Not at all relaxing	Somewhat unrelaxing	Neutral	Somewhat relaxing	Very relaxing
The website would provide ease of access to someone with a disability	Not at all	Not really	Neutral	Somewhat	Very

The pictures used represent the target demographic i.e. students of all proficiency levels at UBC	Not at all	Not really	Neutral	Somewhat	Very
The language on the webpage is accessible and appropriate for all users of all ages and proficiency levels	Not at all	Not really	Neutral	Somewhat	Very

Appendix B

Disclaimer at beginning of survey: “all responses are completely anonymous and will in no way be connected to your file at UBC. By completing this survey, you consent to have your anonymous responses included in the study”.

1	Survey Questions	Responses (Averaged Score)
2	On what device did you access the UBC recreation website—a mobile device or a computer?	1.64
3	How easy is the website to navigate?	3.63
4	Is the experience fast and efficient?	3.58
5	Does the website invoke feelings of social connectivity and warmth?	2.88
6	Does the website seem credible?	4.25
7	Is the website colour scheme appealing?	3.29
8	Is the website text colour and size easily readable?	3.96
9	Are classes easy to navigate to?	3.58
10	Are class descriptions clear and informative?	3.04
11	Are classes easy to choose from?	3.54
12	Are class times and dates easy to navigate to?	3.71
13	Are class times and dates easy to view and understand?	3.92
14	Does the website appear professional?	3.92
15	The website was easily accessible through a mobile device	3.45
16	Accessibility through a mobile device was the same as through a computer device	3.04
17	The website’s different pages flowed well into one another	3.29
18	Is the instructor web page easy to navigate and understand?	3.63

19	Do the instructors seem qualified and knowledgeable?	4
20	Do the instructors seem friendly and socially inviting?	4.21
21	Do you get the impression that boot camp classes at UBC cater to beginners?	3.96
22	Do you get the impression that boot camp classes at UBC cater to somewhat experienced/intermediate practitioners?	3.42
23	Do you get the impression that boot camp classes at UBC cater to very experienced/advanced practitioners?	2.92
24	Were the instructor images a helpful aid for class selection?	3.92
25	Are the images on the webpage appealing/arouse interest?	3.33
26	Did the images provided on the website give a clear indication of potential class structure?	3.13
27	Does the webpage’s layout/colour provide a visually relaxing atmosphere?	3.13
28	The website would provide ease of access to someone with a disability	3.63
29	The pictures used represent the target demographic i.e. students of all proficiency levels at UBC	3.78
30	The language on the webpage is accessible and appropriate for all users of all ages and proficiency levels	4.21

Survey Responses	Combined AVGs
Navigability and Accessibility	3.52
Website design and content	3.43
Credibility and Informativity	3.88
Provided services	3.43

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