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Female Students' Experiences with Active Study Stations

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KIN 464 - 001 Health Promotion and Physical Activity

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Executive Summary

The purpose of this project was to evaluate female UBC students' experiences using the active study stations available in Irving K. Barber Library (IKB). Sedentary behaviour among university students can average 11.10 hours a day, with female students engaging in more sedentary behaviour compared to male students, on average (Haase, Steptoe, Sallis, & Wardle, 2004; Mounlin, Truelove, Burke, & Irwin, 2019). Poor health outcomes associated with sedentary behaviour include cardiovascular disease, cancer, type 2 diabetes, and all-cause mortality (Katzmarzyk, Church, Craig, & Bouchard, 2009). Active workstations or study stations have been proposed as effective physical activity interventions to combat sedentary behaviour, particularly in university library settings (Maeda, Quartiroli, Vos, Carr, & Mahar, 2014).

Semi-structured interviews were conducted with five female participants who reported using the active study stations before. Interview questions were aimed at evoking participants' subjective experiences when utilizing the active study stations, such as level of comfort, usability, and accessibility. Participants were also asked about their motivations to start using the active study stations, physical activity habits, amounts of sedentary behaviour, and living arrangements. The responses collected from the interviews were transcribed and coded into meaningful categories for qualitative description. We interpreted four key categories from the data: awareness, accessibility, comfort, and physical activity/productivity.

Positive participant responses about the active study stations included ease of use, enjoyment and fun, and beliefs that the active study stations were effective physical activity interventions. In particular, participants perceived that the active study stations did help them reduce the amount of time they engaged in sedentary behaviour, and also noted that the idea of moving while they worked improved their effectiveness and productivity in studying. However, participants also indicated many negative inclinations they had towards the active study stations. They expressed difficulties with the limited quantity of active study stations and how they are only available in the Irving K. Barber Library, which is far from the center of campus. Moreover, they stated that social barriers such as awkwardness and embarrassment due to the proximity and positioning of the desk bikes in front of other people impeded their use. All the participants in this study lived off-campus, and noted their living arrangements as another barrier to usage of the active study stations. In terms of motivations to begin using the active study stations, participants stated that they happened to walk by them and were interested in testing them out. Many participants expressed that they believe that the awareness among the general population of UBC students of the active study stations is low.

Three recommendations have been made to our project partner, UBC Athletics and Recreation. First, our project partner should consider moving the already existing active study stations within Irving K. Barber Library to be further apart from each other and situated in more discreet areas of the library. Second, there should be physical and social media advertisements in order to increase awareness and usage of the active study stations. Finally, we recommend that more active study stations be installed in every library across campus in order to facilitate accessibility.

Introduction

Decades of research has linked sedentary behaviour with detrimental health outcomes, such as cardiovascular disease, cancer, type 2 diabetes, and all-cause mortality (Katzmarzyk, Church, Craig, & Bouchard, 2009). Sedentary behaviour comprises acts in which energy expenditure is less than 1.5 metabolic equivalents, such as prolonged sitting (Pate, O'Neill, & Lobelo, 2008). The Canadian Physical Activity Guidelines recommend that adults aged 18-64 accumulate at least 150 minutes of moderate- to vigorous-intensity physical activity per week to accrue health benefits (Canadian Society for Exercise Physiology, 2011). However, investigations have concluded that sedentary behaviour continues to have a negative impact on health independent of reaching this 150-minute target, particularly among university students (Katzmarzyk et al., 2009; Vainshelboim, Brennan, LoRusso, Fitzgerald, & Wisniewski, 2019).

In recent years, active workstations have been proposed in order to reduce sedentary time, particularly for office workers and university students (Chitkara, 2014). Active workstations or study stations are defined as a site where an individual works or studies, with strategies including sit-to-stand desks, cycling workstations, and treadmill workstations (Chitkara, 2014). For convenience and consistency, 'active workstation' will refer to any type of work or desk station that has the user both (1) standing, walking, or cycling, and (2) not engaged in sedentary behaviour while in use (Chitkara, 2014). In a further delineation, the term 'active study station' will refer strictly to one type of active workstation in this report – the cycling desk or, as it is more commonly referred to, the desk bike. In conjunction with our project partner, UBC Athletics and Recreation, we aim to understand students' experiences with active study stations, with a particular emphasis on their perceptions of the active study stations as physical activity interventions to offset sedentary behaviour.

Prevalence of Sedentary Behaviour Among University Students

A study found that a large cohort of full-time undergraduates at a Canadian university spent about 11.88 ± 3.46 hours a day sitting over the course of a semester (Moulin & Irwin, 2017). Sedentary behaviour among university students usually consists of sitting, either in class, while studying, or during leisure time (Deliens, Deforche, Bourdeaudhuij, & Clarys, 2015). Additionally, a recent systematic review that looked at sedentary time among undergraduates further expounded on this issue and found a similar result with undergraduates engaging in sedentary behaviour on average for 11.10 hours a day or 10.69 hours a day, depending on the type of measurement device used (Mounlin, Truelove, Burke, & Irwin, 2019). Interestingly, there seems to be a discrepancy between male and female students. A bevy of studies have found that female students tend to engage in less physical activity and exhibit more sedentary behaviour than their male counterparts (Haase, Steptoe, Sallis, & Wardle, 2004; Sigmundová, Chmelík, Sigmund, Feltlová, & Frömel, 2013). One study found that among a group of 94 college students (46 males and 48 females), sedentary behaviour, defined as sitting time per day exceeding 6 hours, was significantly more prevalent in 69% of females compared to 46% of males, despite most students meeting the weekly recommended amount of physical activity (Vainshelboim et al., 2019). Another study concluded that female university students engaged in only 21.7 minutes of physical activity a day, compared to 38.9 minutes among their male counterparts (Rouse & Biddle, 2010).

Risk of Sedentary Behaviour Among University Students

Many studies have evaluated the associated health outcomes of sedentary behaviour. The results from a systematic review conducted by de Rezende, Lopes, Rey-López, Matsudo, and

Luiz (2014) suggest that risks of certain forms of mortality (all-cause and cardiovascular) are positively linked to sedentary behaviour in adults. More importantly, this linkage was found to be independent of one's physical activity status and body mass index (BMI). In other words, increasing one's physical activity or lowering one's BMI may not necessarily combat the forms of mortality that are linked to sedentary behaviour, though, a reduction in sedentary behaviour itself might. A positive relationship between sedentary behaviour and obesity has also been observed among children and adolescents (de Rezende et al., 2014) and among university students (Castro, Bennie, Vergeer, Bosselut, & Biddle, 2018; Vainshelboim et al., 2019). Yet, there remains to be conclusive data that links sedentary behaviour to obesogenic outcomes in the general population, as observed in the works of Biddle and colleagues (2017) and Thorpe, Owen, Neuhaus, and Dunstan (2011). This discrepancy suggests that university students are more at risk to experience obesogenic outcomes when engaged in prolonged sedentary behaviour than those who are not in university. Other physiological and psychological health outcomes that have been associated with sedentary behaviour include blood pressure, total cholesterol, physical fitness, academic achievement, cardiovascular disease, cancer, and type 2 diabetes (de Rezende et al., 2014; Katzmarzyk et al., 2009).

Activity Study Stations as an Intervention for University Students

Much research has gone into the efficacy of active workstations in professional and academic settings as a means to combat sedentary behaviour and increase physical activity (Alkhajah et al., 2012; Carr, Walaska, & Marcus, 2012; John et al., 2011). With libraries being one of the most populated areas on university campuses that involve sedentary activities, they provide an ideal setting for students to notice and have the opportunity to utilize the active study

stations (Maeda, Quartiroli, Vos, Carr, & Mahar, 2014). In Maeda and colleagues' (2014) study of students' experiences with active study stations in university libraries, active study stations were used by students 15% of the time, and at least once by 7% of those students. Furthermore, students who participated in Maeda and colleagues' (2014) study were shown to have improved acute metabolic factors and reduced risk factors associated with chronic diseases. In relation, Tardif and colleagues' (2018) investigation found that students reported spending an average of 50.9 minutes on the active study stations, increasing their total daily energy expenditure. Moreover, the introduction of active study stations in libraries positively influenced more than 50% of students to use them in the future (Tardif et al., 2018). Students reported seeing an increase in productivity, physical health, attention span, and reduced stress levels after their experience using active study stations (Tardif et al., 2018). It is also worthwhile to note that in Maeda and colleagues' (2014) investigation, women had better participation with the active study stations, compounding the idea that active study stations could be a particularly effective intervention for this population.

The purpose of this qualitative study was to understand the experiences of female UBC students in the use of the activity study stations available in the Irving Barber K. Library (IKB), located at the UBC Vancouver campus, as a convenient and practical physical activity intervention to reduce sedentary behaviour. Additionally, factors such as reported effectiveness, motivations for use, the awareness the general student body has of these stations, and other relevant pieces of information were also collected in relation to the goals of our project partner: UBC Athletics and Recreation.

Methods

Participants

The specific population of interest for this study was female UBC students who had used the active study stations before. As previously stated, numerous studies have found that female university students engage in more sedentary behaviour and less physical activity per day than their male counterparts (Haase et al., 2004; Sigmundová et al., 2013; Vainshelboim et al., 2019). Given this previous literature and the evidence supporting the notion that university-years are a critical time for the development of lifelong physical activity habits, a strategy is needed to meet the needs of this population and to bridge this disparity (Vainshelboim et al., 2019). We were particularly interested in female students' experiences with the active study stations to assess whether they are perceived as viable physical activity interventions for this population.

To recruit participants into our study, we went to Irving K. Barber Library, where the active study stations are located. Originally, we wanted to tape posters in the area of the active study stations, but were informed by library staff that this was not permitted. Instead, we relied on our other recruitment method of purposive sampling, where we actively approached people who were using the active study stations, informed them of our study and research purposes, and gauged their interest in participating. From there, we collected the emails for those who were interested in our study. We contacted twenty-two interested individuals, and a follow-up email was sent a day after. Of the twenty-two participants that were contacted, five replied and expressed interest in our study. We arranged interview times and locations with the five participants over email. After interviews with the first five participants were completed, it was

planned to have more participants recruited. However, the COVID-19 outbreak prevented any further recruiting efforts.

Data Collection

Each participant was individually interviewed once in the second week of March 2020. Semi-structured interviews were used to collect the five female participants' responses regarding their experiences using active study stations. The research purpose was once again expressed, and participants were informed of the voluntary nature of their participation in this study. A consent form was signed by each participant at the time of the interview, and verbal consent for the audio recordings of the interviews was obtained.

For all the interviews, the following order of communication was used. Greetings and informal conversation were used for about five minutes to create rapport. Following this period, the main questions according to the interview guide (found in Appendix) were asked. Some questions also had sub-questions that were determined before the interviews were held. Interviewers followed the flow of the conversation and used these sub-questions as ideas for further questioning. Interviews were concluded by offering the participant to share their final thoughts, and an outline of the next steps in the study was shared with the participant. Audio recordings were used in every interview, and they were transcribed within a week following each interview.

Data Analysis

After all the interviews were transcribed, we proceeded to code the data. Coding is a key step in qualitative description that involves the creation of groupings in the data through

systematic organization into meaningful segments (Kowalski, McHugh, Sabiston, & Ferguson, 2018). In the current study, the data was coded by grouping notable responses from the participants to each main question in the interview guide.

Qualitative description was used to analyze the data. In the analytical process and presentation of the data, researchers using qualitative description aim to fully describe the data instead of developing theories or interpreting the data with existing theories, which are seen in other qualitative approaches (Neergaard, Olesen, Andersen, & Sondergaard, 2009). Qualitative description provides a rich and straightforward description of an experience or an event (Neergaard et al., 2009). Therefore, the final goal of qualitative description is a description of participants' experiences in a language similar to their own everyday language (Neergaard et al., 2009). By getting a rich and deep understanding of the participants' experiences, we were able to identify four key categories related to the participants' experiences with active study stations. The definitions of these four categories are as follows: "awareness" as the sense of the knowledge individuals have of the existence of the active study stations; "accessibility" as the ease with which individuals can reach and use the activity study stations; "comfort" as the feeling of psychological, physical, or social ease when using the active study stations; and "physical activity/productivity" related to participants' perceptions on how active study stations may reduce their sedentary behaviour or improve their academic effectiveness.

Results

The table summarizes the main findings. Further description of these findings will follow.

Results

	Positive	Negative
Awareness	- Students who regularly visit IKB know about them.	- Not known to students who do not visit IKB. - Not enough advertisements.
Accessibility	- Easy to use.	- Not enough of them. - Only found in IKB. - Only available on campus.
Comfort	- Enjoyment, fun.	- Social barriers. - Bikes are too close together.
Physical activity/productivity	- Effective at reducing sedentary behaviour. - Increases productivity while studying.	- Does not offer a very vigorous workout.

Through our research findings from interviews conducted with female participants who use active study stations, we discovered four categories in participant responses. These categories include awareness, accessibility, comfort, and physical activity/productivity.

Participants were generally healthy, fit women with an average age of 23. There was a range of self-reported amounts of physical activity per week among the participants, from Participant 2 who reported going to the gym three times per week, to Participant 1 who reported engaging in no physical activity outside of walking to and from classes. Moreover, most participants said they were generally not satisfied with their current level of physical activity.

Awareness

Participants' average number of uses of the active study stations ranged from one to four. Nearly all of them found out about active study stations by coincidentally entering the Irving K. Barber Library and noticing the equipment as they walked by. Their main motivation for usage of the active study stations was curiosity. The participants developed interest by observing other students utilize the bikes and contemplating the benefits of studying and exercising at the same time.

Participant 5: "I just saw [the active study stations] while I was walking past."

Participant 1: "I had heard that actively moving your body while studying can be an effective way to study better. I saw that people were using [the active study stations], so I thought [they were] popular. I wanted to try [them] for myself."

Additionally, multiple participants noted that they believed that there is a low level of awareness of the existence of the active study stations among the general UBC population. They expressed that it is likely that only students who regularly spend time studying in the Irving K. Barber Library who know about the active study stations. To date, the participants also had not seen any posters or advertisements campaigning to increase usage of the active study stations.

Participant 3: "Honestly, I don't think people really know about [the active study stations]. If you don't go to IKB, then you probably won't see them."

Participant 1: "I don't think that there is a good awareness about [the active study stations]. I have not seen any posters or ads around about them."

Accessibility

Several participants described the active study stations as pleasant and easy to use. However, bigger portions of the interviews surrounded shortcomings in the active study stations' accessibility. The active study stations are only available in one library on campus, the Irving K. Barber Library. Because there are only two seats for the desk bikes, they are often not available for use especially during busy hours at the Irving K. Barber Library. Moreover, participants cited the distance of the Irving K. Barber Library from the core areas of campus (for example, the AMS Nest or bus loop) as a barrier to usage.

Participant 2: "Convenient? No, because there's only one study station on the whole campus, so if I wanted to use it, it may not be available."

Participant 1: "For me, right now, because IKB is so far from most of my classes, I wouldn't feel comfortable just walking there to use the bikes."

It was found that all participants were commuter students who live off-campus. When prompted on barriers they face to using the active study stations related to their living status, participants expressed that living off-campus makes it much more difficult for them to use the active study stations. For example, they often want to get home as soon as possible after their classes end and do not spend extra time on campus. Once again, participants also cited the distance of the Irving K. Barber Library from the center of campus, such as where the bus loop is, as a barrier related to their off-campus living status.

Participant 2: "I don't live on campus, so I can only use the active study stations when I'm on campus...when I have a break."

Participant 1: "I lived in Gage and that was pretty close to IKB, so that would make it more convenient to go use [the active study stations]. But, now that I live off campus and that my classes are on the opposite side of campus from IKB, it's harder to use."

Comfort

Although it was reported that the active study stations were fun and easy to use, our findings show that they may not be as comfortable to use due to social barriers placed on the participants. The active study stations are situated in an open section of the library with many tables around for students to use while studying. Many participants spoke of fear of negative social judgement from other students observing them while using the active study stations. This feeling of pressure and embarrassment was a consistently expressed barrier to the usage of the active study stations.

Participant 3: "It can be a little awkward, just because you're in an open room and everybody can see what you're doing."

Participant 2: "Maybe people are embarrassed about using [the active study stations], because they don't want to be sticking out so much."

When prompted on whether they would feel comfortable exercising at a more vigorous pace while using the active study stations, most participants stated that they would feel uncomfortable doing so. Participants once again cited the location of the active study stations in

one of the open spaces of the library, as well as the proximity of the two seats of the desk bikes to each other as reasons why they felt uncomfortable or awkward to use the active study stations.

Participant 4: "I feel like the bikes are a bit too close to each other, so it may be a bit awkward to use it when someone's using it beside you."

Physical Activity/Productivity

The participants in this study regarded the active study stations as fun and interesting physical activity interventions and they believed that the stations could indeed be effective at offsetting sedentary behaviour. Many enjoyed the aspect of being able to move their bodies while engaging in studying, which usually requires them to sit for hours at a time. The participants recognized that this sedentary behaviour was detrimental to their health and praised the active study stations for allowing them to be physically active while completing their homework and assignments.

Participant 2: "I think that it's really cool that UBC put [the active study stations] there...for students because it's an interesting way to offer different ways to study in the library...opposed to sitting down for hours and hours."

Participant 5: "In terms of whether or not I think [the active study stations] are very useful? Yeah, I think so. Sometimes when I study for too long, I do feel like I have the need to move a bit, to move my legs a bit."

Finally, participants also perceived that the active study stations helped increase their productivity and focus while studying. The idea that partaking in low-intensity physical activity, such as pacing or cycling, while studying could enhance the effectiveness with which they study was commonly cited.

Participant 1: Especially when I'm, like, memorizing notes for school, sometimes I pace around the room and that helps me to focus. So, I think moving really does help."

Discussion

To address UBC Athletics and Recreation's project goals, we conducted semi-structured interviews with five participants to identify key experiences from female UBC students who use the active study stations in Irving K. Barber Library, as well to uncover opinions on the effectiveness of the active study stations as a physical activity intervention. Participants described the active study stations and fun and interesting ways to be physically active, and they noted that their use of the active study stations may have allowed them to focus and study more productively. Frequently cited negative experiences of the active study stations included their lack of availability and accessibility, social barriers, and off-campus living status. Additionally, most participants indicated that they began using the active study stations from coincidentally walking past and noticing them. Many expressed that they believe that the general student population at UBC likely has low awareness of the existence of the active study stations. We hope that participants' evaluations and recommendations for improving awareness and accessibility of the active study stations can effectively inform future installations.

The active study stations were regarded as useful and fun ways to engage in physical activity while studying in the library. They were an appealing physical activity intervention to combat sedentary behaviour for the participants, who noted that long hours spent studying took away from their time to exercise. These positive responses mirror those discovered in Hoppenfeld, Graves, Sewell, and Halling's (2019) study where student participants responding to a survey asking about the implementation of bike desks in Texas A&M University libraries enjoyed not having to choose between studying and engaging in exercise. Additionally, most participants in the current project believed that utilizing the active study stations could improve their studying and productivity. Similarly, from the same study conducted by Hoppenfeld and

colleagues (2019), over half of survey respondents affirmed that they perceived that the bike desks were conducive to their academic studying. Indeed, other investigations have shown that use of active workstations is associated with enhanced attention span, productivity, and cognitive performance in university library settings (Maeda et al., 2014; Tardif et al., 2018).

Despite the positive inclinations the participants of this study had towards the use of the active study stations, they noted some shortcomings. For one, they noted that the active study stations lack availability and accessibility because they are only available at Irving K. Barber Library. In Hoppenfeld and colleagues' (2019) study, survey respondents were overwhelmingly satisfied with the availability of desk bikes because there were six installed in three different libraries spread around the Texas A&M University campus. Maeda and colleagues' (2014) investigation, where respondents had positive attitudes towards the active study stations, implemented thirteen desk bikes, albeit in just one library. It appears that much of the dissatisfaction with active study stations is generally due to the limited number of them and their confinement to only one library on the UBC campus.

All participants in the current investigation were female students who live away from the UBC campus. Their statuses as commuter students represented an additional barrier related to the distance of the Irving K. Barber Library. According to UBC Campus and Community Planning (2019), the average travel time for individuals who transit to or from UBC one-way was 50.5 minutes in 2018. For students who live off-campus, the long transit durations may be motivators to not remain on campus to study or engage in other activities. Participants stated that because they live off-campus, they often want to get home as soon as possible after their classes end. Therefore, they may only be able to use the active study stations during relatively short intervals of time between classes that often correspond with peak hours at Irving K. Barber Library. All

the barriers discussed thus far seem to compound one another. There are too few active study stations that are only available at one location far from the campus core, and they are even more difficult to access if one lives off-campus and cannot use them outside of peak library hours.

Another major barrier to usage of the active study stations in Irving K. Barber Library was negative social judgement. Participants for this project explained that they sometimes felt too awkward and embarrassed to use the active study stations in the presence of others at the library. This may be due to the location of the active study stations in one of the open spaces of the library, as well as the proximity of the two seats of the desk bikes to each other. These findings somewhat go against previous literature; for example, students at the University of Montreal found usage of active study stations to be socially acceptable in a library setting (Tardif et al., 2018). Conversely, Carr and colleagues (2014) found that office workers would be more comfortable using active workstations in a private as opposed to a public or shared office setting, perhaps because they may not feel comfortable using them in the presence of co-workers. The responses from this project mirror the latter findings by Carr and colleagues (2014), albeit in a library rather than office setting. Future studies investigating this discrepancy could be a site for further exploration, and could illuminate pathways to reduce social barriers to usage of the active study stations in Irving K. Barber Library.

In terms of reasons for starting to use the active study stations, all the participants told similar narratives on how they happened to be studying in Irving K. Barber Library one day, noticed the active study stations and thought they were interesting, and were prompted to try them out. Although this small group of participants cannot represent the actual overall awareness of the general UBC population, most of the participants in this investigation believed that the average UBC student likely does not know about the existence of the active study stations. The

participants had not seen any campaigning efforts for the active study stations, and some felt that the only people who know about them are students who regularly study at Irving K. Barber Library. Increased marketing efforts, such as news articles on the library's website, posters, emails, and social media posts, may assist in increasing awareness of the active study stations (Hoppenfeld et al., 2019). Particularly, posters and digital signage may be an effective marketing tool; respondents in Maeda and colleagues' (2014) study about the implementation of active workstations in a university library recalled seeing the poster most frequently.

Several important limitations must be considered in this project. First, participants recruited for this study were not objectively monitored on their usage of the active study stations. Relying on their self-reported usage allowed us to establish rapport and use naturalistic findings for our interpretations of data, but it was possible for participants to report that they were using the active study stations when they were not. Second, only limiting the sample in this study to female UBC students prevents these findings from being generalized to male UBC students or students in other post-secondary educations. Additionally, recruiting additional participants beyond five was not possible because of the COVID-19 outbreak. Having a greater pool of participants that had included males or had been more diverse in institutional membership may have improved the generalizability of this study. Finally, a limitation may arise from the fact that only one researcher did most of the coding in this study and other members reviewed it. This could potentially have affected the quality and diversity of the results and interpretations of the findings.

Recommendations

From the results of this investigation, we can make three recommendations to our project partner in order to increase usage of and facilitate positive experiences when using the active study stations.

1) Move the currently installed active study stations in Irving K. Barber Library.

The participants in this study expressed barriers to usage involving how the active study stations are positioned, with regards to the distance between each bike and where they should be placed in the library. The active study stations should be placed at least two meters apart to allow sufficient space for each person. Additionally, to combat the social barriers felt among students, our project partner can consider placing these bikes in less populated areas of the Irving K. Barber Library, such as along walls or windows. This recommendation can be fulfilled in a relatively short time frame.

2) Advertise and campaign about the active study stations.

Social media platforms serve as a great basis for familiarizing a vast majority of people with up-to-date news, which in this case, can be used to advertise the presence of these active stations and their effectiveness as physical activity interventions. Information could be posted on the UBC Wellbeing website or Instagram page. Aside from social media campaigns, physical advertisements such as posters can further help to promote active study stations when placed around the school. As stated previously, posters and digital signage are particularly effective marketing tools (Maeda et al., 2014). An advertising campaign for the active study stations could

take a longer period of time to complete, but could coincide along already established campaigns, such as the MoveUBC Month in February.

3) Install more active study stations in several areas around the UBC campus.

Moreover, the addition of extra active study stations being placed in the Irving K. Barber Library can be considered. This can include increasing the number of individual bikes or treadmill desks within each station and also on every floor of the building. Active study stations should also not only be limited to the Irving K. Barber Library in order to combat the barrier of distance, as indicated by the participants in this study. By expanding locations available for the implementation of these active study stations, more students could be able to access and use them comfortably. Although this recommendation calls for greater financial and time commitments, installing active study stations in, for example, every library on campus, could improve accessibility.

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Appendix

Interview Guide

1. How long have you been using the desk bikes?
 - a. i.e. a few weeks, since start of term, etc.?
2. How did you find out about them?
 - a. What motivated you to start using them?
 - b. If no, what are some recommendations for promoting awareness of them?
3. What are your thoughts and feelings about using the desk bikes?
 - a. Are they pleasant to use?
 - b. Are they comfortable to use?
 - c. Are they fun to use?
 - d. Are they convenient to use?
4. How much physical activity do you engage in per week?
 - a. Are you satisfied with your current level of physical activity?
5. How do you think the active study stations have been affecting your physical activity or exercise habits?
6. How often do you use the active study stations?
 - a. Is there a certain time of day you tend to use them?
7. Do you live on or off campus?
 - a. What are some of the barriers to using the desk bikes that you feel you encounter that may relate to your living on/off campus?