Introduction

The objective of our research this semester was to highlight and analyze the usefulness and impacts of three community parks in the Kortright Road region of Guelph on physical well-being. Observation and surveys were our main research methods. By designing the last two open-ended questions, we also intend to have a better understanding of community members’ opinions/perspectives about what can be improved in the parks for future use. We started with an umbrella question which is “What community design elements do residents of Guelph feel support or impede their health and well-being?” From that, we decided to develop a more concentrated research question: “What physical features of parks in the South End support or impede
the residents' physical health?”. The parks that were the focus of the research are Oak Street, Yewholme, and Rickson Ave. All three parks offer similar physical features and are located within an approximate eight hundred meter radius. While the Rickson Ave. park offers more established activities such as baseball and soccer, Oak Street and Yewholme parks offer play equipment, stonedust trails, and open space for walking, running, and playing. All three parks are openly accessible to both community members and out-of-towners. We decided to focus our research on these parks for a multitude of reasons. Firstly, the community they’re located in is primarily driven by a family demographic which offered a wide range of age groups and potentially a variety of ethnicities. Secondly, the parks are an excellent sample of the majority of parks in Guelph. Similar to many of the city’s parks, Oak Street, Yewholme, and Rickson Ave. parks offer conventional amenities often found in neighbourhood parks. Those amenities being a space for community members to get outside and enjoy the landscape as well as offering community events from time to time. Finally, each park offered something unique from the others. Rickson Ave. Park, as previously stated, offers ball diamonds and a soccer field to accompany the open space and climbing equipment. Oak Street Park offers seasonal options, as in during the winter you can find a natural outdoor rink while in the summer it hosts community events and space for picnics and whatnot. Finally, Yewholme Park offers plenty of space for local kids, a small soccer pitch, as well as recently new climbing equipment. After completing our research and analyzing our data we were able to come to a couple of relevant conclusions as well as construct a few recommendations. We learned that proximity/accessibility to the parks in terms of active transport both motivate the residents to visit there and participate in physical activities. Moreover, physical features of local parks, in general, do promote physical health. What also impresses us is that the time spent and the frequency of park visits plays a relatively important role in promoting physical activities and thus physical well-being. Ultimately, sport facilities and winter activities are suggested

**Literature Review**

The relationship between natural environments and people has been examined in past research. Emerging evidence showed that public open spaces influence people in many ways. For instance, studies of (Richardson, J.Pearce, Mitchell, & Kingham, 2013) and (Pietila, Neuvonen, Borodulin, Korpela, & Sievanen, 2015) found that by living nearby a green neighbourhood area, people are more motivated to participate in physical activities. More specifically, proximity to urban green spaces is proved to be a factor that has a direct impact on people’s tendency to do different kinds of exercises (Akpinar, 2016). It is suggested that building more parks in the neighbourhood area within walking distance might promote more participation of physical activities among the residents (McCormack, 2010). Moreover, many characteristics of a natural green space, such as park, are associated with park use and physical activity patterns (McCormack, Rock, Toohey, & Hignell, 2010). Features of a park such as park size, wooded areas, trails, paths, the availability of sport fields, play grounds, basketball
courts are considered to play a crucial role in encouraging physical activity among park users (McCormack, 2010). In addition, in a past research, it was found that several people who have dogs indicated dog litterbins and bags as another important park feature (McCormack, 2010). According to a number of studies, park safety was one factor that impeded park use due to the presence of homeless people and drug users (McCormack, 2010). Park maintenance could possibly affect park use as well (McCormack, 2010). Regarding health aspects, although there are only a few of studies found proofs of whether having access to ecosystem services improves people’s health, the relationship is “indirect and difficult to study through traditional methods (Health, 2014). Self-rated health scores are likely to be higher as people hang around urban green spaces more often (Pietila, Neuvonen, Borodulin, Korpela, & Sievanen, 2015). Apparently, even walking and cycling in the park for transportation help people feel healthier (Pietila, Neuvonen, Borodulin, Korpela, & Sievanen, 2015). An interaction with nature through only a short walk might have restorative effects (Health, 2014). In addition, (Health, 2014) states that children who have access to green spaces feel more “physically active”. Being interested in all aspects examined in the past, this study is designed to aim for contributing more to the evidence of the connection between natural spaces and people’s physical health. Specifically, it investigates whether local parks enhance residents’ physical health by encouraging physical activities/ recreation.

Methods

This study consisted of an inductive research approach that aimed to answer the question: “What physical features of parks in the south end (neighborhood 19) support or impede the residents mental/physical health?” which was answered using a combination of research method techniques including participant observation and individual surveys. 

Over the course of a two-week time span and 4 days in the field, our research group visited the following three neighborhood parks; Rickson, Oak and Yewholme. Each visitation began with a 15-minute period where the group members partook in participant observation to determine the various characteristics and properties of the park and those who physically engage in using it. This qualitative method provided insight to questions regarding the amount of people, popular activities, equipment/facilities being used, a general demographic and the space’s hotspots before targeting certain individuals to conduct a survey on.

Participant observation was considered an important component in this study because it is largely concerned with fully understanding the meanings of a place and the contexts of everyday life (Hay, 317). This method was chosen to provide a sense of understanding beyond a formalized interaction of a survey to give a true depiction of people doing ordinary activities without feeling subjected or pressurized by student researchers asking an abundance of questions. Furthermore, participant observation allowed us to comprehend the social structures and interactions with the built environment. These structures may be defined as internally related objects of practices from a social, cultural, economic or environmental standpoint (Hay, 6).
After our group felt as if we had gathered an adequate amount data from the participant observation section of the study, we begin approaching individuals over the age of 18 to request conducting a survey upon. The sample size of this research consisted of 22 respondents who answered a survey of 12 questions in total; 10 being close ended and 2 open ended questions that provided our researchers with more elaborate responses in the complex areas of concern.

The nature of the close ended questions revolved around answering how individuals interacted with what is considered to be the primary built environment park attributes that contribute to benefitting physical health; this included features, condition, access, esthetics, safety and policies (Bedimo-Rung, Mowen & Cohen, 2005). These questions were aimed to answer what and how was being used within the park to meet the overall satisfaction of community members.

The open ended questions were directed towards gaining more elaborate responses to questions that asked participants what they would like to see change in the future and what areas they considered needed improvement to make the parks more orientated around physical health.

Surveys were chosen as the ideal and primary research technique because the flexibility of having both closed and open ended questions allowed the opportunity for standardized interaction whilst still gaining elaborate responses where necessary. Surveys were less complicated to analyse as well. The close ended question made it simple to tally responses and keep answers limited within an area of concentration. This made it easy to correlate the nature of the questions with specific aspects of the park and the answers that individuals provided us with. The open ended questions were analyzed by distinguishing the common themes within the answers to conclude a number of general responses from participants. These themes included connectivity, features and duration.

After all answers were tallied, the themes were distinguished and areas of concentration were thoroughly recognized. These themes were then applied to the initial research question to determine what aspects were being utilized in relation to community member’s physical health, what was needed, what strongly benefited the community and the overall activities that occurred within the the specified parks.

Findings

Structures

The conclusion for what physical activity most park visitor partakes in is walking. It was discovered that a great majority of people surveyed primarily use the park as a simple space to amble around at, or use as a shortcut. However, many local residents also visit the park to play in, this could be with or without the physical structures provided in the area. Fewer people use the park for exercising and even less consider the parks to be a place for biking. Those interviewed were given the opportunity to
choose more than one option, therefore this tally exceeds the total number of 22 people studied.

![Types of Physical Activity](chart.png)

*Graph representing physical activities the respondents take part in within the parks. Walking and playing being the most while biking is the least. People indicated they wanted more exercise-related facilities to increase their participation.*

Similarly, when asked what given physical features people use in the parks, most responded with the walking paths as well. Even those who indicated that they use the playgrounds and playing fields, they still included walking paths in their usage. Aside from walking, baseball diamonds/soccer fields, benches and playgrounds were still used by 68% of the people surveyed.

![Features Used](chart2.png)

*Bar graph representing the question asking, “what features do you use in the park.” This tallies the respondent’s answers. Walking paths used the most, and remaining features used by over half of the total 22 respondents.*

**Duration**

Among twenty-two respondents, there were nine of them saying that they visited the parks less than once a week. Seven people said that they went to the parks once/
twice a week. Five respondents visited the parks more often, three to five times a week. There was only one respondent visiting the parks everyday. In general, the majority of respondents go to the parks not quite often. However, the difference among people visiting the park not quite often and more often is only minimal in terms of numbers. When it comes to the time spent in the parks, most respondents said they were usually at the parks for approximately half an hour to an hour. A minority of them spent one to two hours (only five respondents), while we found that no one said to have spent a longer time there. During our data collection process, there was one elderly lady who attends the park three times a day to walk her dogs told us that the parks are consistently busy and full of active people during summer time. About two to three out of five respondents going to parks for one to two hours agreed that the parks generally support their physical health in many ways. These people visit local parks one to two times a week on average.

![Frequency of Visits and Features Used](image)

*Trend showing how participants who used more features within the park tending to visit more frequently than those who used fewer.*

**Connectivity**

When looking at the data 17 of the 22 participants said that walking paths were one of the main features they used in the parks. In addition, many people who were not surveyed were observed walking through the parks using only the walking paths. We observed at several different times of day on weekdays and weekends and found that the park with the highest use was Rickson from around 3-5pm on weekdays (after school hours), as it was located next to two elementary schools and many children stayed to play.

We found that of the 22 participants we surveyed 19 were from our study area and therefore within close proximity of the parks. Since many people we surveyed were in groups, it is likely they were attending the park with someone who did live within area 19. Furthermore, 20 of the 22 participants provided positive feedback when asked if the park is easily accessible via active transport. The remaining two was neutral.
General

Of the 22 respondents who provided responses to our surveys, not a single person provided negative feedback when questioned about their feeling of safety while at Rickson, Oak, or Yewholme parks. Of our 22 respondents, 9 people indicated they strongly agreed that they felt safe while another 11 people noted they agreed as well. The remaining two people felt neutrally about the subject. Unfortunately this may be perceived as a bias as we only surveyed people who were in the parks at the time and over the age of 18. However, because we received no negative feedback we can conclude the general feeling while at the parks would be a feeling of safety and security.

In addition to the feeling of safety while visiting the parks, all 22 respondents also noted they had zero negative feedback in regards to the cleanliness and maintenance of the parks. Of our 22 respondents, 16 noted positive responses as to whether the parks are well maintained while the other 6 people responded with neutral remarks. Parks are maintained by the City of Guelph but some individuals noted they’ve seen community members doing their part to ensure the parks are well maintained.

![Participants responses to the statements: “I feel safe walking around the park all the time” (left), and “Park facilities are well-maintained” (right)](image)

When asked what improvements could be made to the parks to encourage more physical activity, most comments involved maintaining or adding equipment that could be used to increase the variety of sports. This included fields being maintained properly, or the addition of nets and structures for the use of all ages.

The most common responses regarding how the parks promote people’s physical activity, was that they provided a large open space to do activities they do not have the space for at their own homes. This included sports, walking, biking, playing, and taking their dogs out for a walk.

Discussion

Through looking at our data and findings, we found that a few key themes emerged. Structures, connectivity, and duration were all significant factors that influence a person’s use of parks. The physical structures of a park affect what sorts of activities take place in the park. This then ties into duration. The features of the park that people
use encourage longer visits to the park and more exercise. Finally, connectivity and location was an important aspect in who used the park and when.

Structures

A key theme in the data collection was the physical structures offered within the parks and what people considered important in regards to their physical health and overall usage of the park. Within our survey we asked people what physical features they used most with 5 options including walking paths, playgrounds, soccer fields/baseball diamonds, benches and other. Overall, it seems as if walking and the use of the paths was the most popular response. This dominating response could be a result of the convenience and connectivity the open space of the park has to offer for safe short cuts between schools and streets. Concerning physical well being, this is a positive response considering studies show that an interaction with nature through only a short walk might have restorative effects (Health, 2014)

Playgrounds and baseball diamonds were somewhat popular, with approximately half of the respondents indicating that they actively use them. The reasoning behind these features not dominating the data could be for various reasons. Only 2 of the 3 parks studied offer baseball diamonds and a large field (Rickson and Yewholme) therefore the 6 people interviewed at Oak park may not have considered this an option. Correspondingly, many people used the open ended questions to propose the need for more sports-related facilities. Secondly, the collection of data was limited to people over the age of 18, therefore it is likely that adults would not be as interested in the use of playgrounds for instance. In contrast, the participant observation does indicate a larger, un-surveyed sample of children (especially at Rickson) to use the playgrounds. Finally, the lack of overall use of the park features could also be due to the weather conditions during the data collection days. Winter time is most likely not an ideal time of year to play an outdoor soccer or baseball game for most people, which could also reason with why most visitations are by dog owners and individuals briefly walking through during temperatures below -10˚C.

Regarding overall usage of the park and features, an interesting result was how those who indicated they use 2 or more features, are also the ones who visit the park more than just once a week. 9 people said they visit the park less than once a week, 7 of which indicated they only use 1 feature. Furthermore, 4/5 who said they visit the park 3-5 times a week claim they use 2 or more of the features. This expresses the idea that physical features are a primary attraction for people to engage in the park more often.

To consider the use of structures in relation to physical health, it seems that the two variables correlate well with one another. Those who use more of the structures, are also those who appear to engage in more active physical activities when asked if they partake in walking, playing, exercising, biking and other. Evidently, those who are more active more often, tend to have a better physical well being and the structures offered in parks encourages this notion. When directly asked what one might consider a park element that promotes their physical well being, a great majority linked their answers to the structures of the parks, primarily the open space and walking paths which seem to also promote a social use for park as well.

Furthermore, when asked what people would like to see more of offered within the parks to increase and better their visitations, 16/22 voiced desires for improvement in
areas that support general exercise, and 10 of which specified the need/want for more sports-related facilities (basketball nets was a wide response). This suggests that people will be even more attracted to the parks if they offered more physically healthy elements, which can be considered an act of parks promoting the physical well being of individuals.

**Duration**

Throughout our data analysis and findings, most people go to the parks less than once a week and spend an average amount of time there. Interestingly, the findings indicate a strong correlation between the frequency an individual visits the park and the number of features that they use the park. We strongly believe that the availability of more features in the parks, the longer time spent there by the community members, which is likely to result in a better physical health overall. This holds true when we look at Rickson park during after school hours. We would like to propose that more kids and adults are at the park not only because of the accessibility but because most features are offered in Rickson park comparing to the other ones in the nearby area. In our survey, one respondent who visits the park three to five times and spends an average amount of time there indicated that the local parks support her physical well-being because many features such as ice rinks and size of the park are always available for whatever use a person wants.

Past research reported that duration of physical activities was linked to better physical health; frequency of park visiting was consistent with high self-rated scores for physical well-being. Although during the research, the data analysis process did not interpret exactly and directly what has been reported previously, the key points that we found are still relatively similar.

**Connectivity**

Through our research and literature review we found that people’s connectivity to local parks is a significant aspect in encouraging physical activity. Walking paths within parks are important to creating a better active transportation system and connecting the neighborhood. We observed many individuals, who were not surveyed, simply using the paths to get through the park and not staying. Having this available and easily accessible has been shown to be beneficial to an individual’s physical health by encouraging more active methods of travel. The article by Pietila, supports this by stating that simply using the parks for transportation can help people feel healthier.

Furthermore, our preliminary research shows that simply living near a park can motivate people to be more physically active and encourage more variety in exercise (Akpinar, 2016) and (Pietila, Neuvonen, Borodulin, Korpela, & Sievanen, 2015). This is supported by the fact that a large majority of people surveyed lived within a short distance of the park. As well, the time observed with the most park use was during after school hours at Rickson Park. This location is next to two elementary schools and many children would stop at the park to play on their way home. This demonstrates that convenience of location is significant to encouraging more activity.
Conclusions

In the end we have come to a couple of conclusions. Firstly, we discovered a trend between the number of features available at a park directly correlates with how often and how long community members visit the parks for. A great example of this was the diversity of the parks in our research area. Rickson Park has the most features available, those being walking paths, playgrounds, a soccer field, a baseball diamond, benches, and a basketball court attached to the public school. This is in comparison to Oak Street Park that only has a short walking path and a playground and Yewholme Park that have a walking path, open field space, and a playground. Due to the increased amount of features it was no surprise we observed the most people at Rickson Park. We also strongly believe that the more features are available in the parks, the longer time people would be likely to spend there. A link between duration of physical activities and physical health improvement was also discovered.

To answer our initial research question, parks in the South End of Guelph do indeed support the physical health of community members in the Rickson-Kortright area. We are unable to pinpoint a certain feature that really pushes people to get out to the parks and lead an active lifestyle, but the mix of existing features promote members of the community to get outside and get active. Whether that means going for a walk through the park or playing a game of ball with all the neighborhood kids, the parks are a place to get active and have fun.

In addition, as a group, we would like to make several suggestions for the community partners in improving the quality of the parks in the future. Based on the data collected, most of our respondents thought more equipment facilitating sports should be available in the parks. A lady added that having more benches would be another necessity. We also recommend that there should be more winter activities occurring in the parks due to our recognition that the cold weather conditions indeed impeded physical well-being. There were two respondents voiced their opinion of incorporating skating rinks during winter time as well. We all think that if all of these improvements are made, in the future, local parks would attract more and more people living nearby and encourage them to do more different types of physical activities, hence promote their physical health. The execution of these plans, however, might take some time and future maintenance might need to be enhanced.
Appendices

Bibliography


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Survey Questions

1) How often do you visit this or other nearby parks?
   o Less than once a week
   o 1-2 times a week
   o 3-5 times a week
   o Everyday

2) How much time do you usually spend at the park?
   o 0.5-1 hour
   o 1-2 hours
   o more than 2 hours

3) What are the features that you use the most in parks around your area?
   o benches
   o walking paths
4) What types of physical activities do you usually do in the parks?
   o Biking
   o Playing
   o exercising
   o walking
   o Other (please specify)

5) Do you agree or disagree with these following statements about local parks:
   
   “It is easy to use active transport to get to the park (public transportation, walking, biking)”
   o Strongly agree
   o Agree
   o Neutral
   o Disagree
   o Strongly disagree

6) I feel safe walking around the park all the time
   o Strongly agree
   o Agree
   o Neutral
   o Disagree
   o Strongly disagree

7) Park facilities are well-maintained
   o Strongly agree
   o Agree
   o Neutral
   o Disagree
   o Strongly disagree

8) What is your age range?
   o 18-20
   o 20-29
   o 30-39
   o 40-49
   o 50-59
   o 60+
   o Prefer not to answer
9) What is your education level?
   - Some high school credits
   - High school diploma or GED
   - Some college/university credits
   - University Degree
   - Graduate Degree
   - Unsure
   - Prefer not to answer

10) What area are you from on the map provided?

11) How do you think park design could be improved here to encourage more physical activity?

____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

12) In what ways does the park promote your physical activity?
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
Guelph area map