

“The importance of public space for promoting physical activity in under-resourced populations: The case of Trojan Park”

Diana C. Parra, PT, MPH, Ph.D.
Washington University School of Medicine, Assistant Professor
Program in Physical Therapy and Department of Surgery | Preventive Science Institute for Public Health
dparra@wustl.edu

Trojan Park

- Trojan Park is one of the few green spaces in the City of Walling which has a population of 1,852, a median household income of approximately \$18,000, and a median age of 28 years.
- The park opened October 8, 2016, to provide its residents a place to play and exercise.



Background

- Public access to exercise and play is important for health promotion in urban populations.
- While urban parks have traditionally provided openly accessible recreational opportunities to community members, the impact of such endeavors may vary depending on multiple factors.
- Introducing ways to assess these factors would not only help determine the impact of individual parks, but also identify features that could be improved or more widely implemented.

Fitness Zones

- Fitness zones have been shown to increase physical activity in parks where these types of programs are located.
- Found to primarily benefit segments of the population that are at higher risk for physical inactivity and other poor health outcomes.
- By nature of it being free, these types of facilities and programs are appealing to a segment of the population that could not otherwise afford “for fee” activities.

Methods

- We measured use of the park by creating user intention surveys and analyzing video surveillance footage obtained via permission from local Police, Gateway.
- We used Geographic Information Systems (GIS) and Photo and Recreation in Community Parks method to track video footage showing the use of fitness zones.
- We surveyed 100 people to assess their interest in a \$100 and \$200 program allowing dips for a potential fee waiver during the summer of 2018.

Methods

- In addition we conducted park interviews of park users over a period of approximately two weeks at 7 am on alternating days.
- Only adults over 18 years old were interviewed and they completed an oral informed consent form.
- IRB approval for this study was obtained from Washington University in St. Louis prior to beginning data collection.

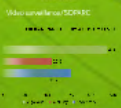
Results



Results



Results



Results



Results



Results



Conclusions

Our findings confirm that urban parks provide a resource for exercise and recreation for underserved populations. However, the impact of such endeavors may vary depending on multiple factors. Introducing ways to assess these factors would not only help determine the impact of individual parks, but also identify features that could be improved or more widely implemented.

Funding

This project was supported by funding from the University of Missouri, the City of Walling, and the Walling Community Center.



“The importance of public space for promoting physical activity in under-resourced populations: The case of Trojan Park”

Diana C. Parra, PT, MPH, Ph.D.
Washington University School of
Medicine, Assistant Professor
Program in Physical Therapy and
Department of Surgery (Prevention)
Scholar, Institute for Public Health
parradaw@wustl.edu

Trojan Park

- Trojan Park is one of the few green spaces in the city of Weldon which has a population of 1,882, a median household income of approximately \$18,000, and a median age of 28 years
- The park opened October 8, 2016 to provide its residents a place to play and exercise



Background

- Public access to exercise and play is important for health promotion in urban populations
- While urban parks have traditionally provided openly accessible recreational opportunities to community members, the impact of such endeavors may vary depending on multiple factors
- Introducing ways to assess these factors would not only help determine the impact of individual parks, but also identify features that could be improved or more widely implemented

Fitness Zones

- Fitness zones have been shown to increase physical activity in parks where these types of programs are located
- Found to primarily benefit segments of the population that are at higher risk for physical inactivity and other poor health outcomes
- By nature of it being free, these types of facilities and programs are appealing to a segment of the population that could not otherwise afford “for fee” activities

Methods

- We received use of the park for tracking park usage through our existing video surveillance footage related with permission from Park Users Governance
- We used the SOFAR System for Choosing Play and Recreation in Community parks with video footage to track program target items
- We created two specific areas for our research of users, 1000 sq. Trojan and 900 sq. on surrounding area for a period of two weeks during the summer of 2018

Methods

- In addition, we conducted park intercept surveys of park users over a period of approximately four weeks at 7 pm on alternating days
- Only adults over 18 years old were interviewed and they completed an oral informed consent form
- IRB approval for this study was obtained from Washington University in St. Louis prior to beginning data collection

Results



Results



Results



Results



Results



Results



Conclusions

The results of this study provide an important insight into the activity and usage requirements of park users.

It is clear that there is a need for more accessible and inclusive recreational opportunities in urban areas, particularly for under-resourced populations. The findings of this study suggest that the design and implementation of parks should take into account the needs and preferences of all users, including those who are at higher risk for physical inactivity and other poor health outcomes.

Future research should continue to explore the impact of parks on physical activity and health outcomes, and identify ways to improve park design and programming to better serve all users.

Funding

This project was supported by funds from the MPH, the Department of Health, Behavior, and Society, and the Center for Health Equity Promotion at Washington University in St. Louis.



Diana C Parra, PT, MPH, Ph.D.
Washington University School of
Medicine Assistant Professor
Program in Physical Therapy and
Department of Surgery (Prevention)
Scholar, Institute for Public Health
parrad@wustl.edu

Background

- Public access to exercise and play is important for health promotion in urban populations.
- While urban parks have traditionally provided openly accessible recreational opportunities to community members, the impact of such endeavors may vary depending on multiple factors.
- Introducing ways to assess these factors would not only help determine the impact of individual parks, but also identify features that could be improved or more widely implemented.

Trojan Park

- Trojan Park is one of the few green spaces in the city Wellston which has a population of 1,882, a median household income of approximately \$18,000, and a median age of 28 years.
- The park opened October 8, 2016 to provide its residents a place to play and exercise.



Fitness Zones

- Fitness zones have been shown to increase physical activity in parks where these types of programs are located.
- Found to primarily benefit segments of the population that are at higher risk for physical inactivity and other poor health outcomes.
- By nature of it being free, these types of facilities and programs are appealing to a segment of the population that could not otherwise afford “for fee” activities.

Methods

- We measured use of the park by conducting park intercept surveys and analyzing video surveillance footage obtained with permission from Great Rivers Greenway.
- We used the SOPARC (System for Observing Play and Recreation in Communities) method with video footage, dividing the park into seven target zones.
- We scanned these specific areas for four time periods (8:00 am, 11:00 am, 7:00 pm, and 9:00 pm) on alternating days for a period of two weeks during the summer of 2018.

Methods

- In addition, we conducted park intercept surveys of park users over a period of approximately four weeks at 7 p.m. on alternating days.
- Only adults over 18 years old were interviewed and they completed an oral informed consent form.
- IRB approval for this study was obtained from Washington University in St. Louis prior to beginning data collection.

Results

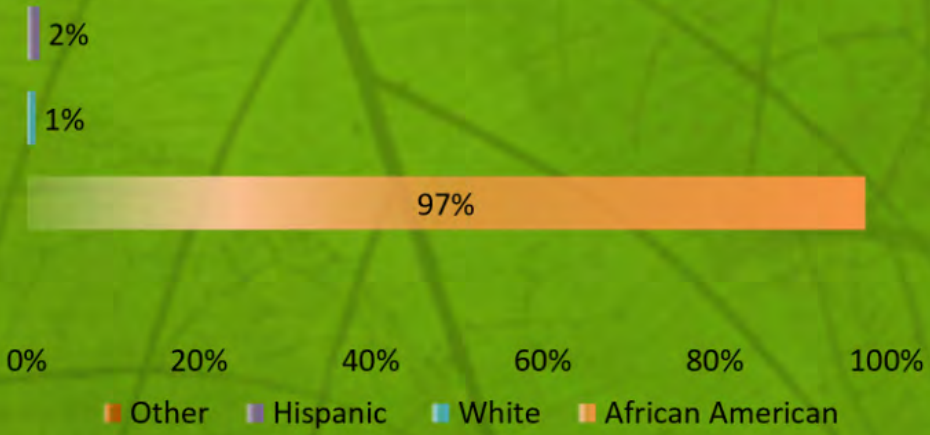
Video surveillance/SOPARC



Results

Video surveillance/SOPARC

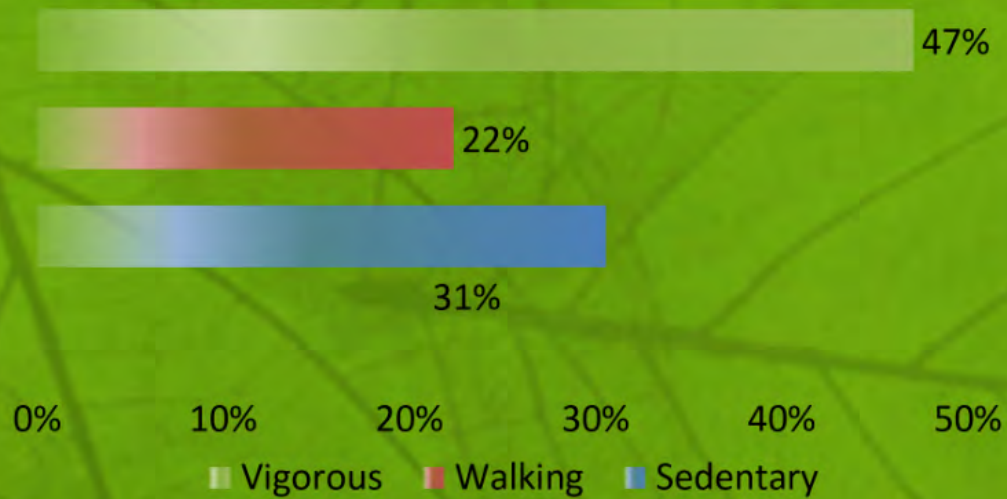
TROJAN PARK ATTENDANCE BY RACE



Results

Video surveillance/SOPARC

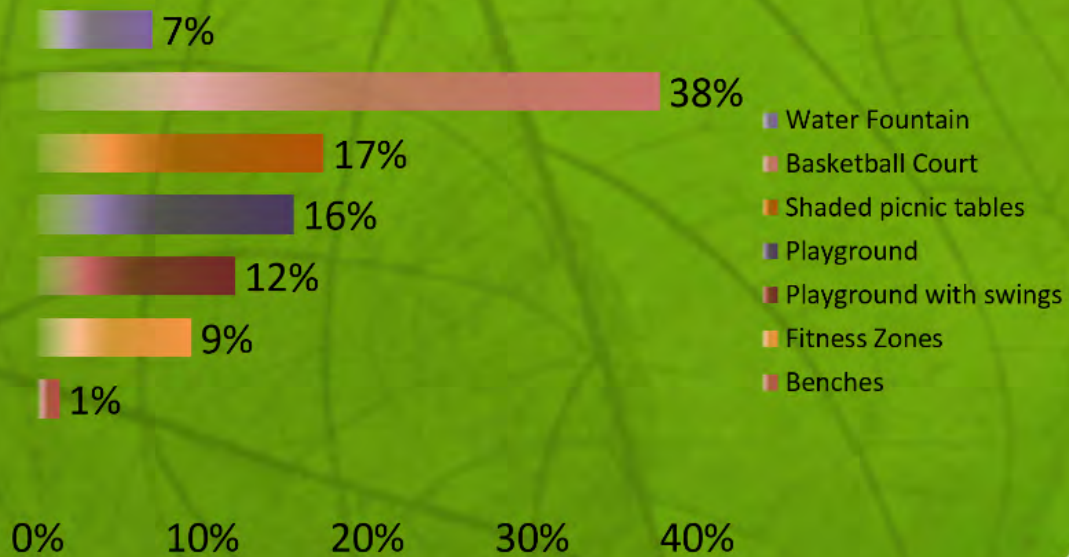
TROJAN PARK USE BY ACTIVITY LEVEL



Results

Video surveillance/SOPARC

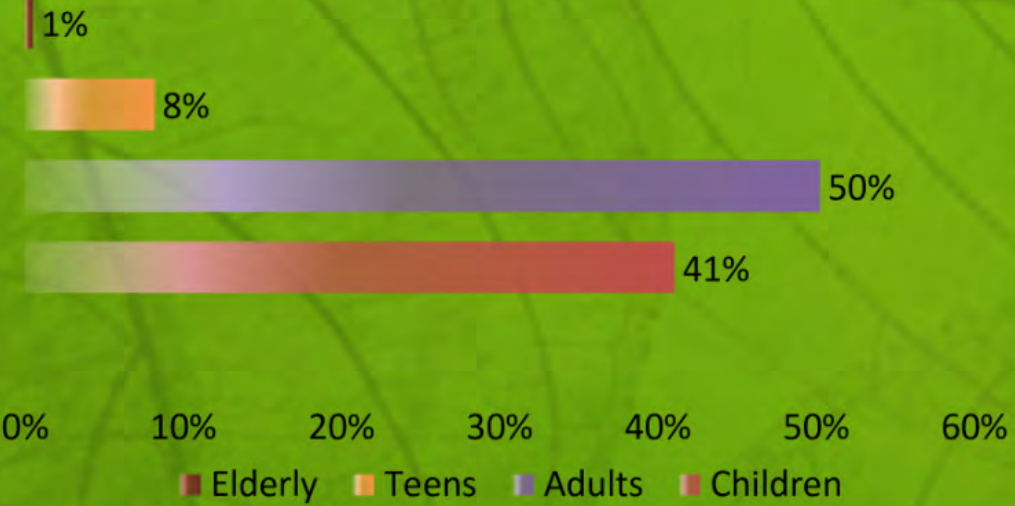
TROJAN PARK USE BY TARGET ZONE



Results

Video surveillance/SOPARC

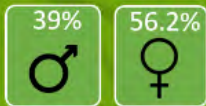
TROJAN PARK USE BY AGE GROUP



Results

Park Intercept Interviews Results

85% said park was easy to get to



100% felt safe



93 individuals interviewed



100% Said they would like to see more parks like this in St. Louis



90.2% Very Satisfied with the Park

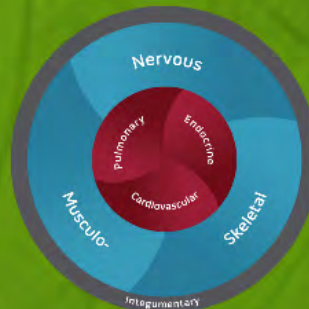


Conclusions

- Our findings establish that urban parks provide an important source of physical activity and social engagement for community members.
- In addition to fitness zones, playgrounds and basketball courts also served as preferred recreational opportunities for children and adults, respectively.
- Furthermore, we identify multigenerational accessibility as a key component to more widespread adoption of healthy practices at urban parks.
- Future studies may expand on ways to improve access across age groups through equipment design or the implementation of organized activities.

Funding

- This project was supported in part by funds from the MTM, Inc. Community Health Access Fund at the Institute for Public Health at Washington University in St. Louis.



Diana C Parra, PT, MPH, Ph.D.
Washington University School of
Medicine Assistant Professor
Program in Physical Therapy and
Department of Surgery (Prevention)
Scholar, Institute for Public Health
parrad@wustl.edu