The Perceptions Atypical Cyclists have on Cycling Clubs and the Cycling Community

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Abstract

At present, there is limited research regarding the barriers and stereotypes ethnic minorities cyclists perceive within the cycling community. An online survey was distributed to members of minority cycling clubs across the U.S. it used open-ended questions on different aspects of their cycling involvement, including their perceptions of a stereotypical cyclist. Basic demographic information was also collected. Responses were coded, and themes identified using NVivo. Participants (N=33) were mostly older adults (Mage = 51.21 years, SD =11.20), and predominantly African American (n=13, 68.4%), male (n=13, 68.4%), and held a bachelor's degree of higher (n=13, 68.4%). The themes that emerged when identifying a stereotypical cyclist were sex (n=16), age (n=13), education (n=13), health appearance (n=12), race (n=10), and no typical cyclist (n=4). Findings of this study provide an insight into the perceptions ethnic minority cyclists have in the cycling community. However, there were participants who felt there was no stereotypical cyclist.

Background

It has been found that regular physical activity participation decreases unfavorable health outcomes (Office of Disease Prevention and Health Promotion, 2018). Individuals who are physically active typically live longer and have lower levels of non-communicable diseases (NCD), mental health issues, and cancer (Office of Disease Prevention and Health Promotion, 2018). Despite the health benefits associated with physical activity in the United States (U.S.) it is reported that less than half of adults and children do not meet current physical activity recommendations (Office of Disease Prevention and Health Promotion, 2018). Furthermore, national data indicates that some ethnic groups are less active than others leading them to have significantly higher rates of NCD (CDC, 2017). The socio-ecological model depicts different factors that influence health behaviors (intrapersonal, interpersonal, organizational, community, and public policy) that tend to overlap and interact as the individual is affected by, or meets, various aspects of the socioecological model (Glanz, 2008).

The number one reason why ethnic minorities do not cycle is due to traffic accidents followed by fear of being assaulted while cycling (Brown, 2016). Other contributing factors to why minorities do not cycle include not feeling healthy enough to cycle, safety, not enjoying cycling, no social support to cycle, and having no bike (Schneider, Kusch, Dressel, & Bernstein, 2018). There are correlations between the design of the built environment and citizens cycling, a determinant that is considered stronger than income and ethnicity (Yu, 2014). Specifically, the lack of cycling lanes, unsafe characteristics of the roads, and no separation between bike lanes and

traffic can be discouraging to cycling (Manaugh, Boisjoly, & El-geneidy, 2017). Improving neighborhoods can lead to more citizens partaking in active transport (Yu, 2014). A study found that the mere presence of bike paths led to a higher frequency of cycling commutes (Manaugh, Boisjoly, & El-geneidy, 2017). Cycling instead of driving provides other benefits, such as reduced air pollution levels, which result in health benefits for the society and better quality of air for the environment (Hartog, Boogaard, Nijland, & Hoek, 2010).

Active transportation, such as cycling, can be a cost-effective way to help reduce the epidemics rising from NCDs, and an easy way to meet recommended physical activity levels. Despite the risks associated with cycling, such as traffic accidents and air pollution, it has been found that the health benefits gained from cycling are greater than the concerns (Fraser, & Lock, 2010). Other benefits induced by cycling include improved mental health, obesity reduction, and disease prevention (Oja et al., 2010). It is estimated that life expectancy gained from being active through cycling is 3-14 months greater than the expectancy of life lost potentially by air pollution (0.8-40 days lost) (Oja et al., 2010).

Cycling can foster opportunities for all community members to be active and help promote social interactions that were previously not present (Dressel, Steinborn, & holt, 2014). Cycling has been determined to be sociocultural and highly interactional due to individuals collaborating to achieve and maintain a mobile formation (Mcilvenny, 2013). Additionally, cycling in communities provides a form of surveillance that can aid community safety (Bopp, Sims, & Piatkowski, 2018).

In the U.S. 34% of adults rode a bicycle in the past year, 15% rode for transportation means, while 32% rode for recreational purposes (Breakaway Research group, 2015). Minority cycling rates may be higher than other ethnic groups, however most of time the cycling is not done leisurely, but instead as a means of transportation due to economic circumstances (Breakaway Research group, 2015). Ethnic minorities tend to live in environments that do not support or favor the community to be physically active, in part due to residential segregation, which creates and fortifies racial inequality in education, health, and socio-economic status (Williams & Collins, 2001).

The design of the built environment affects participation of cycling, a determinant considered stronger than others. Particularly, the lack of an environment providing accessibility to cycling lanes (Manaugh, Boisjoly, & El-geneidy, 2017). For ethnic minorities it is critical to have a supportive community, as minorities tend to cycle with their family more frequently than alone (Lusk, Anastasio, Shaffer, Wu, & Li, 2017). This may be difficult, as people who live in lower socio-economic environments tend to lack social support (Schneider, Kusch, Dressel, & Bernstein, 2018). Some reasons why ethnic minorities do not cycle is attributed to fear of traffic accidents and being assaulted (Brown, 2016). Other factors include ethnic minorities not feeling healthy enough to cycle, safe enough, not enjoying cycling, no social support to cycle, and having no bike (Schneider, Kusch, Dressel, & Bernstein, 2018). Minorities cycling tend to cycle as a means of transportation (Breakaway Research Group, 2015). Due to limiting literature on atypical cyclists, this study aimed to understand the perception ethnic minorities had on a range of factors about cycling.

<div align="center">**Methods**</div>

Participants and recruitment

      The National Brotherhood of Cycling is an organization of cycling clubs from across the United States that aims to promote a love of cycling, increase cycling's diversity, and decrease health disparities found in communities of colors (The National Brotherhood Association of cycling, 2018). In spring 2017 the 54 clubs that belong to the organization were reached out to for contact information. Of these clubs, 40 had published contact information on their websites. These clubs were contacted to determine if they would be willing to send out an email invitation to their members to participate in an email survey about participating in a cycling club. Six clubs indicated that they would be willing to share the survey, though other clubs may have forwarded the online invitation to the survey without confirming their willingness to do so. The clubs that responded were from across the United States specifically Illinois, North Carolina, Texas, Florida, and Georgia. Eligible participants were adult members of the cycling clubs. An informed consent statement was presented to participants when they opened the link from the email invitation. The Institutional Review Board at Pennsylvania State University approved this study.

Measures

      Participants self-reported basic demographic information and responded to nine open-ended questions about their participation in the cycling club and perceptions of cycling (Table 1). The open-ended questions in table 1 were developed with input from experts in the field and members of the cycling community.

Table 1. Survey questions
Please list your top three reasons for cycling
Why do you choose to belong to a cycling club?
How were you introduced to the sport of cycling?
Describe a stereotypical bicyclist in your community
Agree with the stereotypes?
How do friends and family support/hinder biking?
Clubs to help break down barriers
Strategies to break down barriers
Health disparities

Analysis

Qualitative

A detailed coding book was developed grounded in a social ecological framework identifying links between individuals' health and their environment (Sallis et al., 2006). Responses to questions were coded by two independent coders; discrepancies in codes were discussed, using standard procedures of triangulation (Creswell, 2007). Coded data was entered into NVIVO 11.0 (QSR International). Themes were derived from the frequency that they appeared in responses from the open-ended questions. Demographics were analyzed using SPSS 22.0 (Armonk).

Results

Participant Characteristics

Participants (N=33) were mostly older adults (Mage= 51.21 years, SD= 11.20), and predominantly African American (n=13, 68.4%), male (n= 13, 68.4%), and held a bachelor's degree or higher (n=13, 68.4%).

Motives/Reasons for Starting to Cycle

Participants expressed several reasons and motives as to why they decided to start cycling. The most common themes that emerged concerned: improving fitness (n= 27), the social aspects of the activity (n= 20), enjoyment of the activity (n=16), physical health outcomes (n=9), to be outside (n=6), and to work on mental health (n=6).

Introduction to Cycling

Table 1 shows how participants were introduced to cycling, along with representative quotes. The most common way included introduction to cycling through friends, peers, and acquaintances (n=15). Followed by individual's self interest in cycling (n=8). Next was health, wellness, and performance (n=7); for example, one participant mentioned "I started cycling as a low impact workout when I was obese and needing to lose weight". Other ways in which participants got into cycling were through social events (n=3).

Table 1.

Themes	n	%	Representative Quotes
Friend/ peer/ acquaintance	15	45.45	"My neighbor invited me to a group ride. I went and have been hooked ever since."
Self interest	8	24.24	"Saw clubs riding through my neighborhood "
Health/ wellness/performance related	7	21.21	"I was introduced to a local cycling club by a spinning class buddy from a local gym."
Social events/ group rides	3	9.09	"Got into rode cycling when I got older and for introduced to groups."

Reasons for Belonging to Cycling Club

Table 2 reveals some of the reasons that participants decided to belong to a cycling club. The most common response (n=20) had to do with being social, with one participant remarking "I enjoy the camaraderie, it's a great way to learn and improve (lots of wisdom being shared on rides and meetings)." In addition to this desire to be socially connected the next most common response was to meet people with shared interest (n=9). There was also the mentioning of the safety gained in a cycling a club with a participant stating, "There's safety in numbers and to develop techniques for more efficient riding" (n=7). Other reasons to join a cycling club encompassed training logistics (n=4), challenge of being pushed and motivated by a group (n=3).

Table 2

Themes	n	%	Representative Quotes
Social	20	60.61	"The camaraderie, being able to talk to other cycling addicts--it's like AA for cyclists"
Shared interest	9	27.27	"Meeting new people of similar interests and learning of different lifestyles."
Safety	7	21.21	"I was doing a lot of riding by myself and thought that riding with other would be enjoyable and safer than being on many desolate roads."
Training logistics	4	12.12	"Learn cycling techniques and etiquette from the more experienced "
Challenge	3	9.09	"Enjoy the challenge of riding with a group pushes me to ride faster and better"

Social Support

Participants also described the way family and friends impact their cycling. The number one way was through support (n=9), with one participant stating that "My friends support my participation and understand that I ride early in the morning on weekends so that limits the time that I spend out late the evenings before". Followed by family and friends not riding however still being understanding (n=6) and relationships being impacted with family and friends (n=6) one participant stated:

> They are more conscientious motorists (or at least they claim to be) regarding cyclists because they know that I'm out on the road. That said, they typically call me to complain about what they consider to be bad cycling behavior. I do spend some time educating them that sometimes cyclists do things for our own safety, which may be upsetting about what they consider to be bad cycling behavior.

Other ways that family and friends impacted participants cycling were through not hindering nor supporting their participation in cycling (n=5).

Health Disparities

The role cycling can play in addressing health disparities was also inquired about. Of the 33 participants, 15 stated that cycling improves their health. A participant stated," Significant health benefits and typically improves lifestyle which helps with stress effects". Other participants stated that it helped to decrease and deal with their diseases (n=4).

Stereotypes / Agree with Stereotypes

Participants were inquired to identify the characteristics of a stereotypical cyclist in their communities. The first identifying characteristic being the sex (n=16) a participant stated that "[there are] both men and women riders although there are considerably more male cyclists". The next characteristic was age (n=13) with the most common age mentioned as being in the "40's and 50's". Income and education level were summed up with the statement of a participant that commented" Income level is at a point where a $1,500 bike is not going to take food off the table. Education is all inclusive" (n=13). As for health appearance (n=12) one participant stated that they "Tend to be healthier but usually have a health -related reason for cycling (diabetes, hip/knee replacement = cannot run)". Regarding race most of responses were Caucasian (n=10). However other participants found no typical cyclist in their community with a participant commenting, "I find all races/ ethnicities riding in my community" (n=4).

Table 3 features some of the themes that emerged when participants were asked if they agreed with the stereotypes that had previously surfaced in a previous question on the stereotypical cyclist in their communities. The frequent response was that there was a specific race that was perceived as more likely to cycle (n=15). Income seemed to be a theme in which most participants agreed you had to have disposable income to participate in cycling (n=5). Gender was another theme that coincided with the responses of a stereotypical cyclist with a participant stating, "I can say that cycling in my area is more common to men" (n=3). Another theme to emerge was fitness level (n=3).

Table 3

Themes	n	%	Representative Quotes
Race	15	45.45	"The perception is Whites are more prone or seen cycling and have the means for the most hi-tech gear… Truth is cycling is not only a sport, it is an activity! It is not only for elite bullet fast athletes!"
Income	5	15.15	"Income- Generally need to be in a position to spend $500 minimum to start."
Gender	3	9.09	" Bike races even in the city of Chicago are still overwhelmingly white males"
Fitness level/ health/	3	9.09	"Many different cycling groups that have members that are made of all different speeds."

skill level/ ability			

Strategies to Overcome Barriers

Participant's shared some thoughts on the ways that cycling clubs can help to overcome some of the barriers in more diverse communities. The most prevalent response was hosting events (n=8) a participant stated that "Having more cycling events in communities that normally do not get to experience the sport". Followed by a similar idea which was that cyclists must be visible (n=4). Developing the infrastructure of communities that support cycling was also mentioned (n=3) and working alongside community leaders to breakdown some of these barriers (n=3).

Break down barriers

Table 4 describes some of the idea's participants had on ways to help break down barriers associated with cycling. Most participants stated being inclusive to all and different levels of riders (n=8). Another common response was to eliminate stereotypes with a participant stating what they already do in their cycling club "We work along with other organizations that promote cycling to African American youth in providing bicycles, teaching bike handling and maintenance" (n=6). In addition, further themes to emerge were to ride safely (n=4) and ride in different areas with a participant stating that his "club does make a point to ride in communities that normally would not see a group of African American cyclists" (n=4). Another theme to emerge was to set a positive example (n-3).

Table 4

Themes	n	%	Representative Quotes
Being inclusive	8	24.24	"Making a conscious effort to offer more developmental rides particularly with slow speeds for beginners"
Breakdown stereotypes	6	18.18	" I ride with my club (predominately black) to show everyone that cycling is a viable option for brown people too."
Ride safely and follow the rules	4	12.12	"Most importantly follow the rules of the road"
Ride in different areas or neighborhoods	4	12.12	"When people see cyclist of varying ages, races, body types ride, in their communities, they believe that it's an attainable goal/sport for them."

Social or political mechanisms	4	12.12	"They can work with political and social powers to encourage cycling"
Set a positive example	3	9.09	"Be the change you want to see… I ride… to show everyone cycling a viable option for brown people

Discussion

This study provides new insights into the attitudes and beliefs of the growing ethnic minority (atypical) cycling community that have the potential to inform policies and programs to promote an active lifestyle in diverse communities. Overall, the main themes that emerged regarding why participants started to cycle were to become fit and to socialize with others who were like them. Most of responses indicated that they were introduced to a cycling club through their social support network. Thus, unsurprisingly, family and friends were found to impact the rate of participants cycling many commented that cyclists join a cycling club to manage/prevent diseases. Participants also stated some of their perceptions on the stereotypical cyclist in their community and how to address breakdown of the stereotype. Ultimately, participants also expressed the barriers to cycling in ethnically diverse communities, which included the lack of visibility of atypical cyclists.

Fitness and socializing with others like them were the most prominent themes to emerge with respect to why participants started to cycle. Many also mentioned pure enjoyment of the activity and to be healthy which is a consistent theme throughout the study. There was also a desire to be outdoors and to maintain mental health. These findings are the same with those reported in the previous literature examining motivation among competitive and non-competitive cyclists, which, prior to this study, has tended not to not include diverse participants (LaChausse, 2006). However, physical activity research overall has plenty of diversity. These findings indicate that atypical cyclists begin cycling for similar reasons to typical cyclists to socialize and for health reasons (Nettleton & Green, 2014). Thus, providing a better understanding of the importance that ethnic minorities place on socializing with others like oneself and this being a possible area to target in the promotion of cycling within diverse populations.

Most participants were introduced to their cycling club through their social support network, though others independently decided to start to cycle. The intent to be healthier and to socialize with others are recurring themes in questions pertaining to deciding to cycle (both study and literature).

Considering the limited research on why ethnic minorities join cycling clubs, findings demonstrate the influence social support networks can have on ethnic minorities' participation in cycling. In the study conducted by Courneya, Plotnikoff, Hotz, and Birkett (2000) findings showed that social support is a strong indicator of how people regard their intention to become physically active and staying active. Participants were consistent with other findings many commenting that cyclists join cycling clubs to meet people like them, with most participants making comments along the lines that they longed for camaraderie, a deeper social connection among people who perform the same activity. There is minimal research on why ethnic minorities decide to join a cycling club these findings highlight how pivotal the desire for social connections is within ethnic minorities. Participants repeatedly reported the need to observe someone like them being active

can cause more ethnic minorities in diverse communities to become active if they were seen cycling in these communities.

Continuing the theme of social motives, networks, and norms, family and friends were found to be an important influence on the participants' participation in cycling. Most of the responses stated how supportive and helpful their social network is during cycling events. The support was to the point of driving to various locations to provide food and equipment when needed in competition stops. There was also a consensus among participants stating how cycling in a positive manner is impacting their relationships. These findings again illustrate what Gibbison and Johnson (2011) found that ethnic minorities who have a social support network that is highly supportive are more likely to have high levels of physical activity than those who lack the support. This can be used as a foundation to have future research interventions that incorporate skills so ethnic minorities develop strong social supports to start and maintain this form of physical activity.

Participants agreed characterizing the stereotypical cyclist an affluent white male. Other characteristics that typified a stereotypical cyclist were that they tend to be healthier or dealing with a health condition. However, some participants stated that they did not find any stereotypical cyclist within the cycling community. Findings support previous literature on characteristics of a stereotypical cyclist and provide new insight into the stereotypical cyclist from the perspective of atypical cyclists (Steinbach, Green, Datta & Edwards, 2011). These findings will help to add to the literature on differences diverse populations may perceive on a stereotypical cyclist.

Participants expressed the barriers to cycling in ethnically diverse communities, which included the lack of visibility of atypical cyclists and poor infrastructure. Some of the suggestions to overcoming the visibility barrier included having atypical cyclists' cycle in these diverse communities. This coincides with previous research that states that visibility is important to get more ethnic minorities to be active (Steinbach, Green, Datta, & Edwards, 2011). Future research interventions should consider incorporating rides in which atypical cyclist cycle in diverse communities to promote cycling in diverse populations. Inclusivity, through the provision of rides for all abilities and ages, emerged as a common theme in relation to how the characteristics of a stereotypical cyclist could be broken down. Some participants stated that they cycle to breakdown views of the stereotypical cyclist in the hope to let those like them know that cycling is a viable option. This is congruent with aspects of self-efficacy the vicarious experience in which seeing another individual perform an activity can give confidence to the individual observing to perform the activity (Bandura, 1977).

Limitations and future research recommendations

The limitations of this study included a small volunteer sample, incomplete responses, and directly sending the survey to the cycling clubs across different geographical areas could skew results due to different environments. Future researchers should consider recruiting a larger sample size that can encompass people from various diverse backgrounds and geographical areas. A larger sample size would also allow for the opportunity to examine differences in participants based on ethnic background and/or geographical area. It may also be worth considering adopting a mix-methods approach that incorporates previously validated scales to assess aspects such as cycling motives and barriers.

Conclusion

This study has provided insights on perceptions that ethnic minorities have about the cycling community. The purpose of the study was to understand how these atypical cyclists have broken the norm in the cycling community with the aim to learn how to get more members of various communities active. This study provides a foundation for possible interventions and policies needed to promote this form of active lifestyle as described above. The main correlations why participants decided to cycle stated in this discussion can lead to the development of interventions and programs that emphasize what participants stated to promote this form of active lifestyle in diverse communities.

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