Fun, Fast and Fit: Influences and Motivators for Teenagers Who Cycle to School

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Comment on This Article

Abstract
Data collected from questionnaires, individual interviews and a group interview shed light on influences and motivators for six Vancouver teenagers who were old enough to drive but regularly cycled to secondary school. The participants began cycling by themselves around the age of ten because it afforded independence, fun, speed and time efficiency. Their parents resisted habitual chauffeuring and modeled bicycle use for recreation and transportation. The participants continued cycling throughout their mid-teen years because those early motivators—along with fitness and health—were stronger than negative comments from peers. They rode neither new nor expensive bikes, and considered bicycle “advocacy” to be too aggressive to be directed at their peers. However, rigorous tactics to encourage friends to cycle indicated that friends of current cyclists are an important target in bicycle promotion at secondary schools.

Keywords: cycling, secondary schools, teenagers, youth participation, school travel planning, sustainable transportation

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Introduction
Despite high ownership of bicycles by children and youths in Western Societies (Go For Green 1999; Killingsworth and Schmid 2001), cycling remains the least utilized travel mode on the daily commute to school (Gilbert and O'Brien 2005; Orsini 2001; 2004). Among preteens, cycling can be the most desired—but unfulfilled—mode of travel to school (Kearns, Collins and Neuwelt 2003; O'Brien 2001; Osborne 2005).

Many of the factors restricting cycling are based on parental concerns; “busy lifestyles, increasing journey distances, ...lack of older role models, danger from traffic and isolated attacks, ... and security of their bike” (Osborne 2005, 235). Efforts to address this discrepancy between most desired and least utilized have often focused on these parental concerns (Way to Go! 2001) or on environmental awareness (Off Ramp 2000; Resource Conservation Manitoba 2005). Such efforts have met with limited success.

A 1985 study (Preusser, Williams and Lund), “Driver Licensing Age and Lifestyles of 16 Year Olds,” surveyed 15- and 16-year olds in three U.S. states with different licensing conditions. “In all three states, bicycle riding two or more times per week decreased from ages 15 to 16.” The implications are that even if a 16-year old is not legally entitled to drive in their home province (or state), our societal association between 16 and the car may be sufficient to cause older teenagers to cast off a “pre-16” transportation habit such as cycling. A more recent study (Pucher and Buehler 2005) shows that the people most likely to refer to themselves as cyclists are in the 6- to 17-year-old category. The result is a lower inclination towards cycling after adolescence, and a corresponding shortage of adult role models cycling among children and youths (Kola-Olusanya 2005).

And yet, the health benefits of regular cycling outweigh the potential loss of life from road casualties by a ratio of 20 to 1 (Hillman 2000). Despite the risk of a collision and the exposure to vehicle emissions which can affect rider health, riding a bike can be good for the body and the community. Daily bicycle commuting is regular physical exercise and therefore offers an excellent opportunity to counter health problems associated with physical inactivity.

In addition, cycling benefits the environmental, economic and social health of a community. Riding a bike, like walking, is an active and sustainable form of transportation that requires no regular input of fossil fuels, and therefore no pollutants are emitted (Burrows 2004; David Suzuki Foundation 2004). Economically, an increase in the proportion of people cycling would lower road-infrastructure costs and require less than the currently allotted amount of land for parking (Toor and Havlick 2004).

Bicycles reduce the speed with which we move through public spaces (as compared with automobiles) and therefore create opportunities for social, face-to-face contact with neighbors (Malone 2002). This personal contact reminds us to show common courtesy to others in a manner directly opposite to the anonymity and “false” sense
of protection that cars can have in fueling road rage (Alvord 2000). Lastly, the potential for this kind of community engagement is part of what makes cycling fun for many cyclists.

**Youth Involvement in Sustainable Transport Research**

There is growing recognition that considering the needs of children and youths in urban planning will improve our ability to address the increasing health concerns associated with car-dependent communities. However, we need to take this a step further and incorporate the aspirations and perspectives of children and youths into the planning process itself (Mitchell 2005; O'Brien 2004). This research contributes to that process. This study focused on six teenage cyclists who were old enough to drive a car. These older teenagers were selected because they represented an anomaly to the decline in cycling after turning 16 (Preusser, Williams and Lund 1985).

The primary question behind this research was: *What influences and motivators have caused teenagers who are old enough to drive to regularly cycle to school instead?* Using a research approach that emphasized life experiences, we heard directly from teenage cyclists. We gathered data through a questionnaire, an individual interview and a group interview, phased over six weeks to develop a deepening understanding of the teenagers’ life histories.

**Findings**

The six participants all came from different secondary schools within the city of Vancouver, British Columbia: half from the East Side, and half from the more affluent West Side. Their principals put forward their names as the most recognizable commuter cyclists at their school who were old enough to drive. Four of the participants were of European descent, one was Latino and one was Asian-Canadian. Four were 16-year olds in Grade 11 and two were 17-year olds in Grade 12. Four were male and two were female.

Only one of the participants had a driver’s license. Three of the participants had their learner’s permit and two had not begun the driver licensing process. As a group, the participants cycled to school more than two-thirds of the time (68 percent). This was an impressive rate considering that the average cycling rate for secondary schools rarely reaches 3 percent (Evenson et al. 2003; Orsini 2001).

Each of the participants’ households had a car: four had two cars and one had three cars. The availability of an automobile in each household implied at least the occasional option of being driven to school and suggested that the decision to regularly cycle was a personal choice. According to Sanqvist and Kriström (2001), it is the opportunity created by real options that gives rise to “personal motives” (114) such as the choice to not drive.

The participants had been granted their parents’ permission to cycle independently (the “bicycle “license”—Tranter and Pawson 2001) when they were between four
and seven years old (two participants) or between 10 and 12 years old (four participants). There was no relationship between gender, geography (East or West side of Vancouver) and the onset of regular bicycle commuting.

Once granted permission to cycle unsupervised, the participants cycled on their own or with friends to the beach, forest trails, friends’ houses, the park, school, up and down hills, and to the store to run errands for their parents. At that time, cycling offered independence and speed. According to participants, independence referred to the ability to explore and get places on their own, to travel without parents, and to go off with a friend on bikes. The category of speed consisted of two sub-categories: the thrill of moving fast (e.g., downhill) and a smaller sub-category of time efficiency (e.g., getting somewhere faster).

Turning 16 had no effect on the frequency with which these participants cycled to school. Half of them very clearly stated that becoming old enough to drive had no effect on their overall commitment to cycling. The motivation for these 16- and 17-year olds to continue cycling revolved around a central theme of choice, and some very strong evidence that they simply felt it was fun to ride. The categories and sub-categories of motivations that emerged from an analysis of their responses were identified as: enjoyable (fun), better than the alternatives (fast) and healthy (fit) (Table 1).

### Table 1. Motivators of cycling, other than people

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Sub-category</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>enjoyable</td>
<td>5</td>
<td>love it, fun, enjoyable</td>
<td>5</td>
</tr>
<tr>
<td>better than the alternatives</td>
<td>11</td>
<td>faster than the alternatives</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I don’t like the alternatives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cycling is more convenient than alternatives</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cycling is better for the environment</td>
<td>2</td>
</tr>
<tr>
<td>healthy</td>
<td>6</td>
<td>good for my health and fitness</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>it offers a regular physical challenge</td>
<td>2</td>
</tr>
</tbody>
</table>

When asked, “Who was influential in guiding you toward regular bicycle commuting?”, all but one of the respondents’ 25 comments referred to someone older: 19 of those responses (76 percent) specifically identified parents (Table 2). These responses listed parents modeling the use of bikes on the commute to work, when bicycle touring, in running errands and leading family excursions by bike.
Table 2. People who were influential in getting the participants to cycle

<table>
<thead>
<tr>
<th>Who</th>
<th>N</th>
<th>Categories identified as influential</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>adult-family (i.e. parent)</td>
<td>19</td>
<td>modeling the behavior</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>not routinely offering access to car (i.e., not driving and therefore not enabling a carpool, not owning a car/second car)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>teaching how to cycle and maintain bike</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>travel and/or time spent with parent</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>purchasing bike/lock for participant</td>
<td>2</td>
</tr>
<tr>
<td>adult-school (i.e. coach)</td>
<td>2</td>
<td>encouragement to keep in shape</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>modeling: we have a teacher who bikes everyday from (North Van) (HC)</td>
<td>1</td>
</tr>
<tr>
<td>siblings</td>
<td>2</td>
<td>competition/keeping up with older sibling</td>
<td>2</td>
</tr>
<tr>
<td>peers-school (strangers)</td>
<td>2</td>
<td>modeling: I saw that there was a couple of kids who did cycle to school, so I thought that if they cycled I would ask my mom if I could (NB); in grade 6 when I was bussing to school, I’d see this one bike rider who would pass us everyday and then I figured that the bike would be a little bit faster (HC)</td>
<td>2</td>
</tr>
</tbody>
</table>

These teenagers had a basic understanding of some of the environmental issues related to the automobile, both locally and globally, even though they did not regard reduced car use as a motivator for cycling. Since beginning to commute by bike, they watched their social network “mature” into driving age, car-use, and car-ownership. Some participants expressed discouragement over this increase in automobile use among peers.

A lack of secure bike storage at secondary schools had not prevented these youths from cycling. They locked their bikes to fences and railings, and the old and tattered nature of their bikes was described as a tactic to make their bikes less appealing to thieves and vandals. However, lack of secure storage put their bikes at risk of being stolen and undermined efforts to convince friends to cycle to school with them.

The participants believed that regular cycling made them more fit than their peers. Several of the male participants discussed this in relation to starting a new sports season.

*It’s always nice at the beginning of a new sports season, when you get out, for soccer for instance, when you get there and you’ve been biking all summer, and biking to school all year, you come there, you see everyone trying to run around and do their first warm-up lap, and*
they’re all passing out, trying to get around, and you’re just getting around nice and easy not even sweating (HC).³

This fitness was also discussed with respect to increasing levels of intensity. The frequent reference to fitness as a motivator for cycling indicated they made active bike rides to school rather than slow, meandering journeys. An example of this physical exertion related to a supposed barrier: cycling up hills.

I like challenging myself to things like biking up a hill; sometimes I take the hardest route, sometimes I take the easiest route, depending how I feel because basically it makes me feel better if I can push myself to new limits (MW).

Physical exertion from cycling was connected with another benefit—positive actions. All six participants agreed with the statement: “You feel good about yourself when you do positive actions, and there’s always a positive way to do everything” (Flay and Allred 2003, 4). The youths listed very dynamic activities that made them feel good about themselves; dancing, hiking, hockey, soccer, biking, group games and theatre. When asked, “What about these activities makes you feel good?”, three categories emerged: competence (e.g., I am good at it, I get positive results); fun (e.g., always laughter, surrounded by friends); and positive physical exertion (e.g., labor-intensive stuff, escape from the pressures of school).

The Bicycle: Transportation Tool or Fun Device
The participants were asked to describe their bike in order to record the terminology used. Two participants gave only the color of their bike by way of description. Two gave the color and the number of gears, and the other two spoke of specific bike components. Five of the six participants rode second-hand bikes which they described as “very old,” “really old” or “pretty old.” The “pretty old” bike, belonging to a 17-year old, had been his older brother’s tenth birthday gift.

Five of the six participants described how they got their bike—three of them explained this in detail. Their responses indicated more of a relational connection than an objectified view of the bicycle as a tool. This suggests that their bikes represent more than just a means of transportation, but something “which supports and enhances their living” (Loughland et al. 2003, 14).

Bike Activists
As cyclists who were old enough to drive, the youths were asked about their self-perception as bike activists. In general, they did not feel comfortable identifying themselves as such. In fact, there was a tendency to underplay the visible presence of arriving on a bike at their school. Most of the participants believed that there was little out of the ordinary in their frequent bicycle use although virtually none of their peers cycled to school.

Despite their reluctance to adopt an “activist” label, the youths’ comments indicated that they exhibited two distinct attributes of bicycle activism: a) loving what one is
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doing (i.e., personal preference), and b) vigorous campaigning to get others to
do the same (i.e., external conduct). Still, activism clearly made the participants
uncomfortable and they discussed it with some apprehension. Within these two
attributes, four sub-categories related to the degree of the activist’s passion: doing
it, liking it, supporting it, or demanding it.

The participants did not want to be associated with actively trying to change others
(i.e., students, peers, or strangers). However, when referring to encouraging
friends to start cycling, the same negative associations were not present. Four of
the six participants spoke of how they had tried to encourage friends to cycle.

*I’ve got seven people cycling. For one of them I said, ‘I’ll fix your bike
for free if you cycle to school.’ So I fixed it and then this other guy, he
lives right next to me, and I said, ‘hey, d’you want to bike to school
every morning?’ and he said no, so I forced him to [laughs]; this other
guy wanted to get into shape so he got the same kind of bike as me,
and he started biking with me, and then there’s a couple of others
(HC).

Not only did the youth in this study not see themselves as activists, but they also
did not believe that their peers would interpret the regular cycling of 16- and 17-
year olds as bicycle advocacy. In fact, 16- or 17-year old cyclists could be seen as
lowering the status of becoming old enough to get a driver’s license. That is, a 15-
year old might be cycling for any number of reasons, but 16-year olds who choose
to cycle are—at least temporarily—ignoring their elevated status as “entitled to
drive a car.”

When asked at whom they believed that cycling advocacy should be aimed, most
participants replied, ”whoever enjoys cycling!” (SG). They felt the focus should be
on young teens and “people who already ride bikes (but don’t cycle to school)
because they already know it’s fun” (SG).

**Being Recognized as a Cyclist at School**

We also asked participants how being recognized as a cyclist affected them socially.
The open nature of this question left room for two distinct interpretations: “how
friends see me” and “how peers see me.”

With regard to friends, the question became, “Do you feel that being recognized as
a cyclist affects the way you are ‘seen’ by your friends at school?” In this regard,
the responses were positive, suggesting that cycling to school poses a low social
risk among one’s friends. Cycling to school at the age of 16 or 17—although
generally “odd,” “weird” (SG) or “uncool” (NB)—did not necessarily pose a problem
for friends.

However, in the social climate of secondary school, the same could not be said of
peers, where the above question became, “Do you feel that being recognized as a
cyclist affects the way you are ‘seen’ by your peers at school?” The responses fell
into three categories, all relating to a lessening or minimizing of the consequences of being visible as a cyclist in secondary school: acceptance (e.g., “I do it for myself, not for anybody else” - TB), confident disregard (e.g., “I really couldn’t care less” - SG) and discretion (e.g., “I don’t wear stretchy pants or anything like that” - GP).

These last statements differ from the majority of positive statements about cycling throughout this study, and further research may shed light on whether concerns about peer approval/disapproval influences the typical 97 percent+ of students who do not cycle to secondary school.

**Conclusions**

This study suggests that promoting cycling may show greater potential with teenagers than working to dismantle barriers to cycling. The dismantling of infrastructural barriers at schools typically requires decisions by the school administration, which has responsibility for associated budget decisions. With independence and self-empowerment identified as significant benefits of cycling, the promotion of cycling in secondary schools should rather focus on creative strategies that enhance youth involvement.

Likewise, flashy bikes are not needed to promote cycling. In fact, inexpensive, second-hand and/or “chopper” bikes can make cycling affordable to more families, and these “roughed up” bikes are less likely to be stolen or vandalized. A lower initial investment for second-hand bikes will also be more attractive to parents who may be asked to contribute to the purchase of a bike.

Moreover, a parent who rides a bicycle for local errands, family bike rides, or the commute to work is modeling the bicycle as a viable, alternative transportation option for their children. The visibility of a parent or role model on a bike can be a prime influence to encourage children and youths to make use of the bicycle as an independence generator and become increasingly responsible for navigating their way through their community. Furthermore, judicious refusals to chauffeur daughters and sons to nearby destinations, despite real or perceived peer pressure to be “good parents” can reinforce youths’ new-found independence of bicycle transportation.

Despite their enthusiasm for cycling, the participants in this study had refrained from general bike advocacy. However, they did describe rigorous tactics to encourage their friends to cycle with them. This suggests that other students who currently cycle could be encouraged and supported to get their friends cycling. Bicycle promotion could focus on recruiting friends of current cyclists to increase the visibility and use of bikes at school.

The youth cyclists in this study linked cycling with both physical and emotional well-being. These are two critical concerns for health experts. While there is growing interest in the physical activity levels of youth, there has been little research regarding youths and sustainable transportation and almost none regarding
emotional well-being and transportation (O’Brien 2005). We do not know whether self-confidence and internal locus of control influenced the youth in this study to cycle or was enhanced as a result. However, we do know from the burgeoning field of positive psychology that an internal locus of control is associated with subjective well-being (Twenge, Zhang and Im 2004). Subjective well-being, or happiness, is demonstrated to benefit health. Happier people live longer, recover from illness more quickly and are more likely to seek out and act on health information (Diener and Seligman 2004). Concerns regarding youths’ mental health and the rise in youth depression in particular, suggest that we ought to pay greater attention to activities that provide a sense of well-being for our youths—such as cycling.

**Looking Ahead**

To encourage teenagers to cycle to school, current cyclists could be offered in-school training on cycling safety, building chopper bikes, bike maintenance, and doing tricks and jumps. As their skills improve, they could be encouraged to invite friends into the bike-training program with the current cyclists coaching their friends and cycling alongside. The friends of current cyclists may be the best early target audience for bicycle promotion because among friends, rigorous tactics to promote cycling seem to be acceptable. This bike-buddy process would build upon existing social networks while strengthening bike safety skills among casual and new cyclists. Such an approach would rely on active involvement of the students themselves in order to create a “level of cool” that would not alienate new or reluctant cyclists.

The findings of this study suggest a need for additional research into influences and motivators for youth cyclists relating to:

- **geography**—studies of youth cyclists in urban, suburban and rural communities;
- **age**—studies of youth cyclists across a greater age range, (i.e., 10-, 15-, 20-, 25-year olds);
- **experience**—studies of the life histories of people who have been regularly commuting by bike; and
- **mentors**—studies of people mentioned as influences by youth cyclists to examine the presence and role of intent associated with bicycle mentoring.

**Endnotes**

1. The driving age is 16 in British Columbia.
2. Following this project, the youth participants returned for a final group discussion and to design, build and ride their own chopper bikes. These sessions were recorded and produced into a 24-minute video—*Cycle for Life: Influences and Motivators for Youth Cyclists*. Copies of this video can be ordered from cycle4life2005@yahoo.ca.
3. For anonymity, student “initials” were not derived from their name.
4. “Chopper bike” is a term used to describe funky, individually designed bikes created from chopped and re-assembled bike parts.
Arthur Orsini, M.A. (Env. Ed.) works at the Auckland Regional Transport Authority. He is in New Zealand for 2005/2006 to develop a youth leadership program that promotes walking and cycling in secondary schools. The study reported in this paper formed the basis of his Master’s Thesis in Environmental Education at Royal Roads University in Victoria, BC, Canada where Catherine O’Brien acted as his thesis supervisor.

Catherine O’Brien, Ph.D. is a Research Associate with the Centre for Sustainable Transportation in Canada. She has co-authored the development of child- and youth-friendly land-use and transport planning guidelines and has been instrumental in advancing research in Canada regarding the impacts of motorized transport on the health of children and youth.

References


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Appendix A. Interview Prompts: WSB Coordinators, Parents and School Principals

I am keen to learn what you believe are the broad benefits to children who travel to and from school on WSBs.

- Why are you supportive of or involved in WSBs?
- Why do you want your children / the children of your school to walk the WSB?
- Do children like walking the bus and if so, why?
- Is there any evidence of children other than WSB walkers benefiting from the WSB?
- Do you think that WSBs increase children’s physical activity levels to an significant degree?
- Has involvement in the WSB led to any change in your thinking / your children’s attitudes towards any of the following:
  - Transport
  - Physical activity and walking
  - Playing outdoors in the neighborhood
- Are there any signs of children in your area feeling safer now than they might have before walking on the WSB (e.g., safer crossing roads on their own, safer playing outdoors)?