

Exploring Attitudes to Bicycling: *A Retrospective Look from Adulthood*



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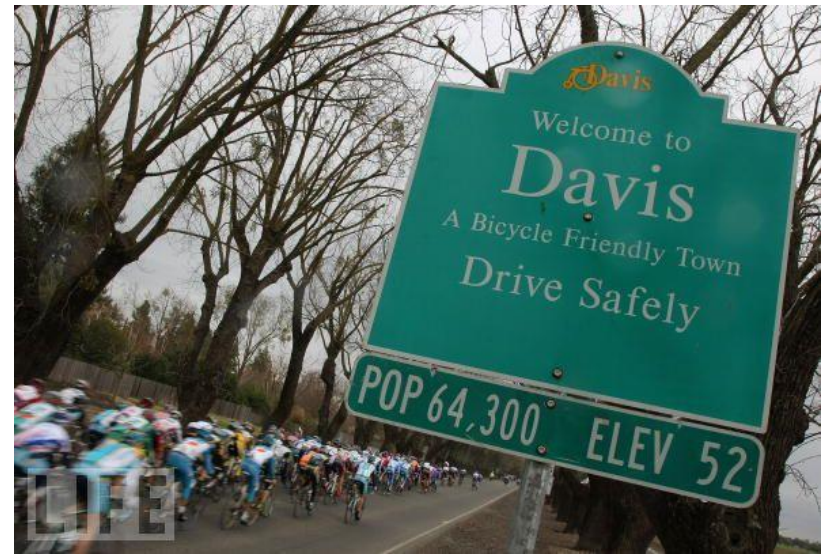


- 18 km west of Sacramento, the state capital
- 113 km northeast of San Francisco
- 619 km north of Los Angeles



Davis, California

A Bike Friendly Town



But Davis is not the norm...



Developing our Research

Literature Review

Limited number of studies done on **attitudes** and **social norms** as it relates to bicycle use. (Davies, 1997; Gatersleben, 2010; Daley, 2011).

Previous Research at UC Davis

A **positive attitude** (i.e. “liking biking”) was the most significant factor for predicting bicycle use among many factors measured (Xing et al., 2010).

Research Focus

Explore adult **attitudes to biking** throughout the life-course, using the “life-course perspective” (Elder, 1998).



“Exploring Attitudes to Bicycling”: A Mixed-Methods Study

Who: 54 Davis residents ages 25 – 65 years

What: 10 minute self-administered questionnaire
60 minute face-to-face interview

When: July – October 2010

Why: To explore factors that shape, create, or influence **attitudes to biking** throughout the life-course



Respondent Demographics:

	25-35 years	36-45 years	46-55 years	56-65 years	Total
Male	9	5	4	3	21
Female	13	6	7	7	33
Total	22	11	11	10	54

	Sample	Davis	U.S.
Median Age	38 years	25 years	37 years
Median Income	\$30-40K	\$40-50K	\$40-50K
% White	74%	70%	65%
Education	Bachelor's	Bachelor's	High School

Access to a Bike: 92%

Mean Number of Days Biked in Past Week: 3.5 days



Where 54 Participants Spent their Youth:



- 7** mixed regional experience (U.S. only)
- 6** mixed regional experience (U.S. and **international**)
- 3** **International** experience

International

- India – 4
- England – 1
- Japan – 1
- Brazil – 1
- Peru – 1
- Mexico – 1



The “Life–Course” Interview

Life Stages for Data Collection:

- Memory of learning to ride a bike
- Elementary School
- Junior High/Middle School
- High School
- Post High School/College Years
- Young Adult
- Mature Adult



Data Analysis

Interview transcripts were **open-coded** for emerging themes using qualitative data analysis software **Atlas.ti**.

Three coders maintained a 92% inter-rater reliability rate.

A significant number of codes emerged for the **youth period**.



Data Analysis

The majority of codes could be categorized as either **negative** or **positive** associations towards bicycling during the youth period.

Negative Associations:

- Uncool
- Fear/Anxiety
- Nerdy/Dorky/Weird
- Unhip/Untrendy
- Embarrassment/Shame
- Teased/Made fun of
- Lower-Class/Poor
- Unsexy
- Unsocial
- Unfeminine

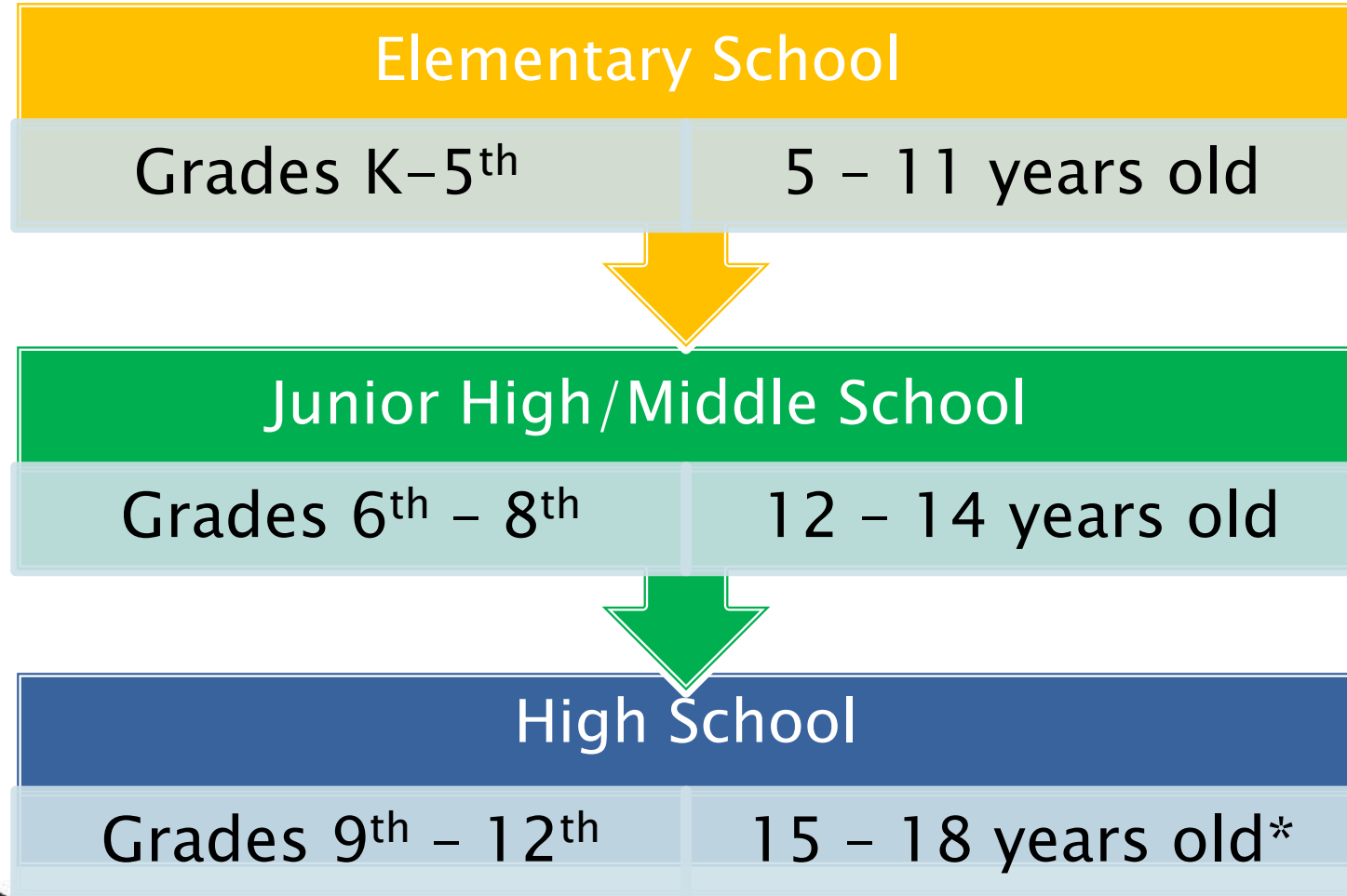
Positive Associations:

- Independence/freedom
- Excitement/fun
- Cool
- “Green”
- Social
- Unique/Special
- Athletic
- Hip/Trendy
- Powerful
- Sexy



Data Analysis:

The Youth Period in the U.S.



* Driving age is 16 in most states.

Results:

Elementary School Themes

Bikes were seen as recreational “toys” for kids.

“My impression in general was that bikes were kind of for kids” Female, age 27 (California)

Bikes provided independence for kids.

“I think when you’re a kid...it’s the closest thing you can get to having a car. You can take off and just go anywhere on your bike. Even though you really can’t, but you feel like you could...and that’s such independence.”

Female, age 56 (California)



Results:

Junior High/Middle School Themes

Bikes continued to provide independence.

“It was definitely my first experience of really being independent, because...we would go to stores, and get ice cream and not have to beg our parents...we had our bikes to go there on our own.” Female, age 38 (California)

Negative associations with biking emerged.

“I think it was probably starting to become less cool, even though we probably didn’t know it.” Male, age 34 (California)

Preference for walking over biking emerged.

“...in junior high it was almost cooler to even just walk somewhere than to pull up on your bike. I still liked biking, but it wasn’t enough to get me through the peer pressure.” Female, age 56 (California)



Results:

High School Themes



Bikes were “off the radar”, and abandoned. Driving emerged as the preferred option for transportation.

“I definitely didn’t really care or think about biking...it was off the radar.” **Female, age 25 (Texas)**

“Biking wasn’t lame to do, but it was one notch below driving, and driving was the holy grail of getting to school.” **Male, age 25 (California)**

“...the cool thing was to drive cars and probably get laid in them. You’re not getting laid on your bicycle.” **Female, age 31 (New Hampshire)**

“If I’m going to meet some girl I need to be in a car not showing up on my bike right? That was important to me at that age.” **Male, age 43 (California)**



Results:

High School Themes

Negative associations with biking increased.
Bikes were associated with negative image and stigma.



“If you were a teenager riding your bicycle, you were probably considered a loser, because everybody drove or had a ride. It would be hard for someone to ride their bike and not get teased.” **Male, age 50 (New Jersey)**

“If you were on your bike....especially in high school...then something is wrong with you.” **Male, age 26 (California)**

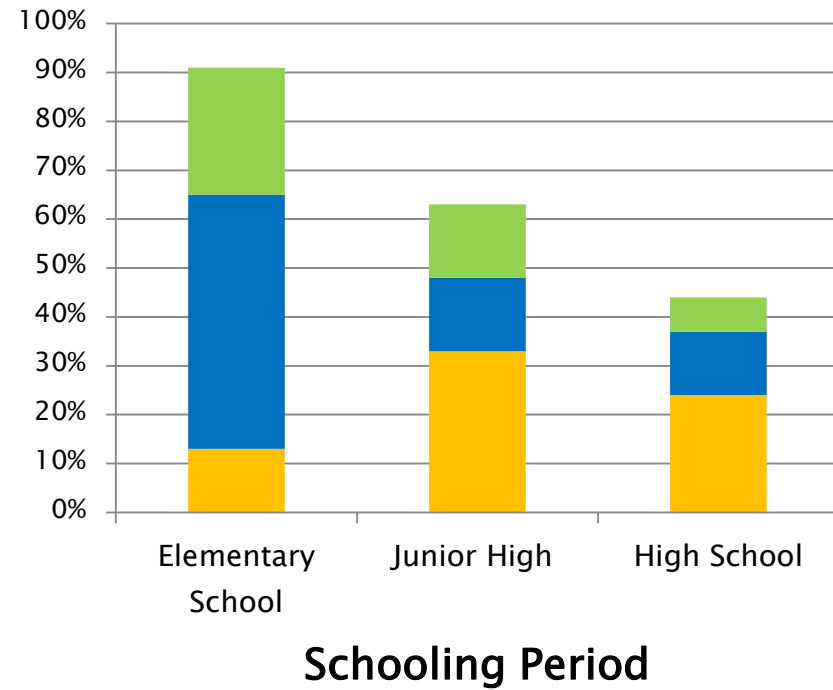
“High school students probably might have thought it was a little dorkier, you know, if you could get a ride that was cool. But, I don’t think it inhibited me from riding my bike.” **Female, age 60 (California)**

“In high school biking is not that cool and...didn’t seem trendy enough to do.” **Female, age 25 (California)**



Results

% of Type of Biking in Youth

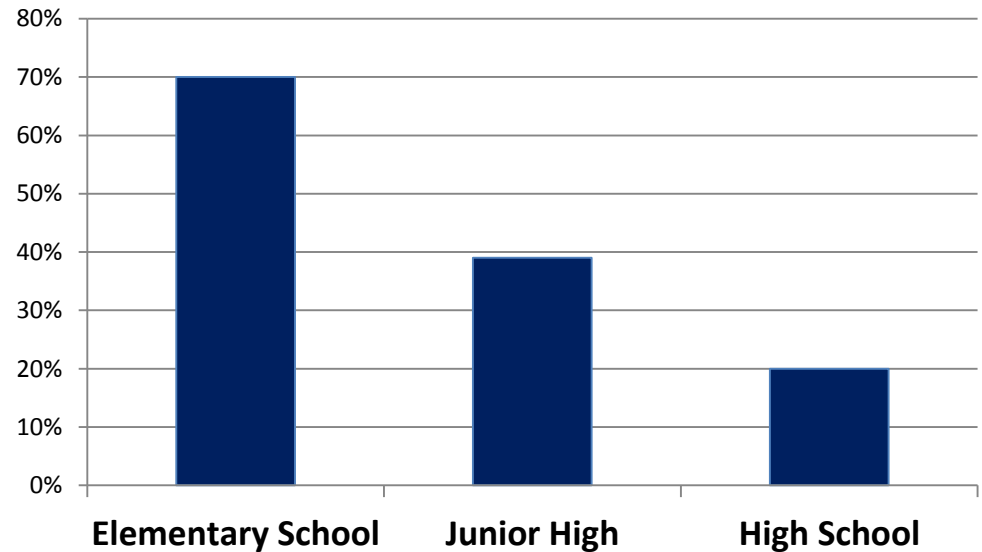


Schooling Period



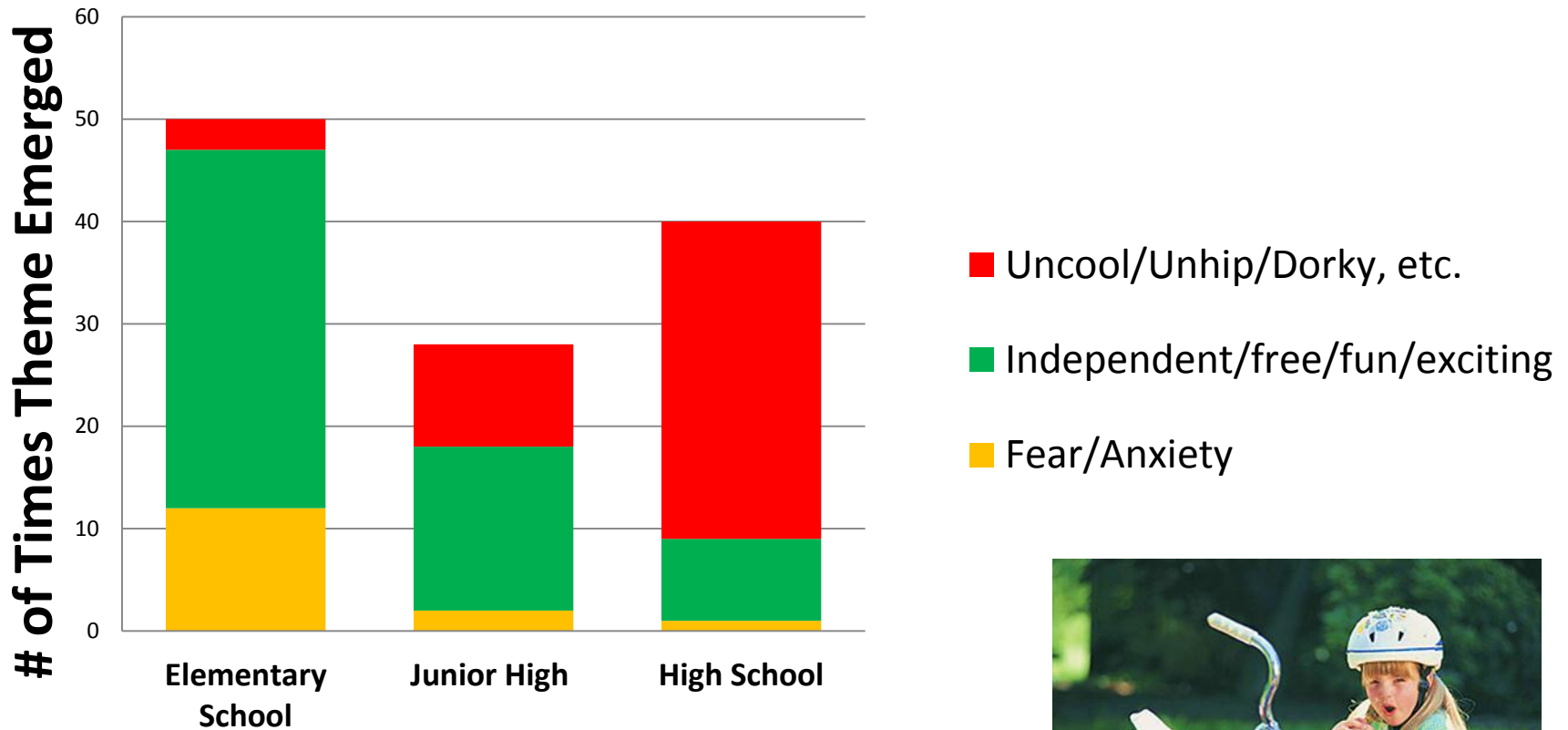
- Both
- Recreation
- Transportation

% Liked Biking



Results

Associations with Biking in Youth



Summarizing Results

There was a tendency for the following to **DECREASE** over the Youth Period:

- All types of biking, especially recreational
- Positive attitudes towards biking
- Positive associations with biking

Bicycling was “**off the radar**” and abandoned.

For most participants, biking in the high school period was associated with **negative image** and **stigma**.



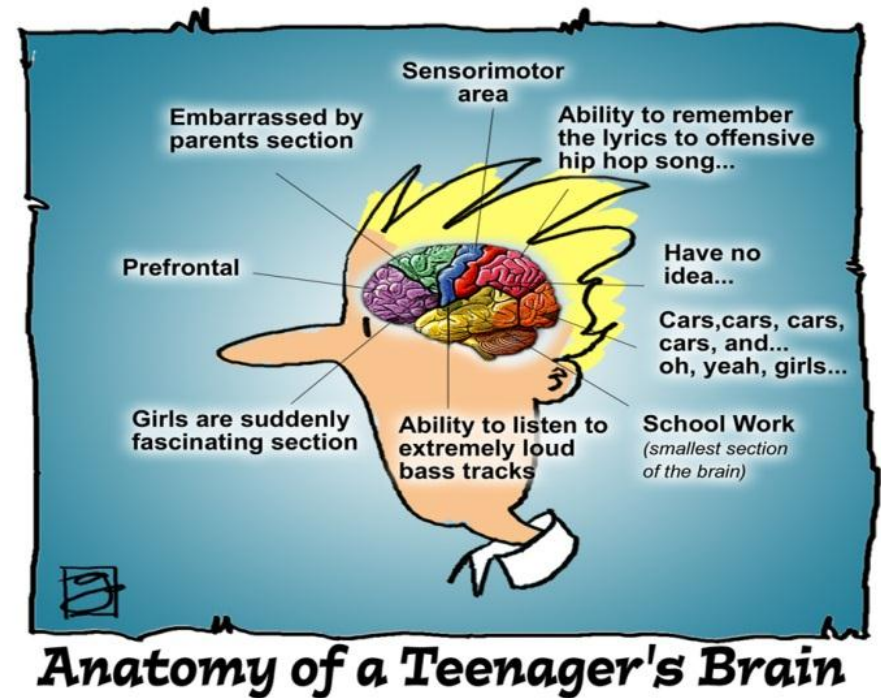
Discussion

- Children that live in bike-friendly societies, where levels of cycling increase rather than decrease over the course of childhood, are more likely to become cycling adults (Jensen, 2008, Pucher et al., 2008).
- To achieve a more bike-friendly society, communities must encourage bicycling **throughout the life-course**, especially in the teen years.



Discussion

- Adolescence is a time of pronounced **identity development** (Lerner, 2009).



- Teen transportation choice is linked to their evolving identities.
- The bottom line, **image matters** to teens!

Discussion

To increase rates of bicycling in adolescence communities must attempt to:

Minimize the stigma
Improve the image

associated with bikes
and bicycling.



Policy Suggestions

Social marketing campaigns

Bicycling programs

...developed by and for teens could help to change attitudes towards bicycling among adolescents (Orsini, 2007).



Next Steps

Conduct bicycling research on adolescents with different socioeconomic and cultural backgrounds.

Study **subsets of adolescents** that have positive attitudes towards bicycling.

Understand the image associated with different subsets.



Adolescent Subsets



teens turning
green
a way of life

Thank You!

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