

Commute well-being among bicycle, car, and transit commuters in Portland, Oregon

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Why study commute happiness?

Subjective well-being is an evaluation of one's happiness or life satisfaction. Travel behavior likely plays a role in determining subjective well-being.

This study uses data from Portland, OR commuters to ask the following questions:

- Can "commute well-being" be reliably measured?
- Do active mode users have higher commute well-being than motorized mode users?
- What other factors (e.g. travel time, traffic, and job satisfaction) influence commute well-being?

Evidence of connections between active commute modes and well-being could further support active transportation policies.

Web-based surveys (n = 828)

- Email and intercept
- Workers commuting to central Portland, OR
- January – February 2012
- Variation in commute well-being is tested with Pearson Correlations, t-tests, ANOVA, and an OLS regression model

Commute Routes

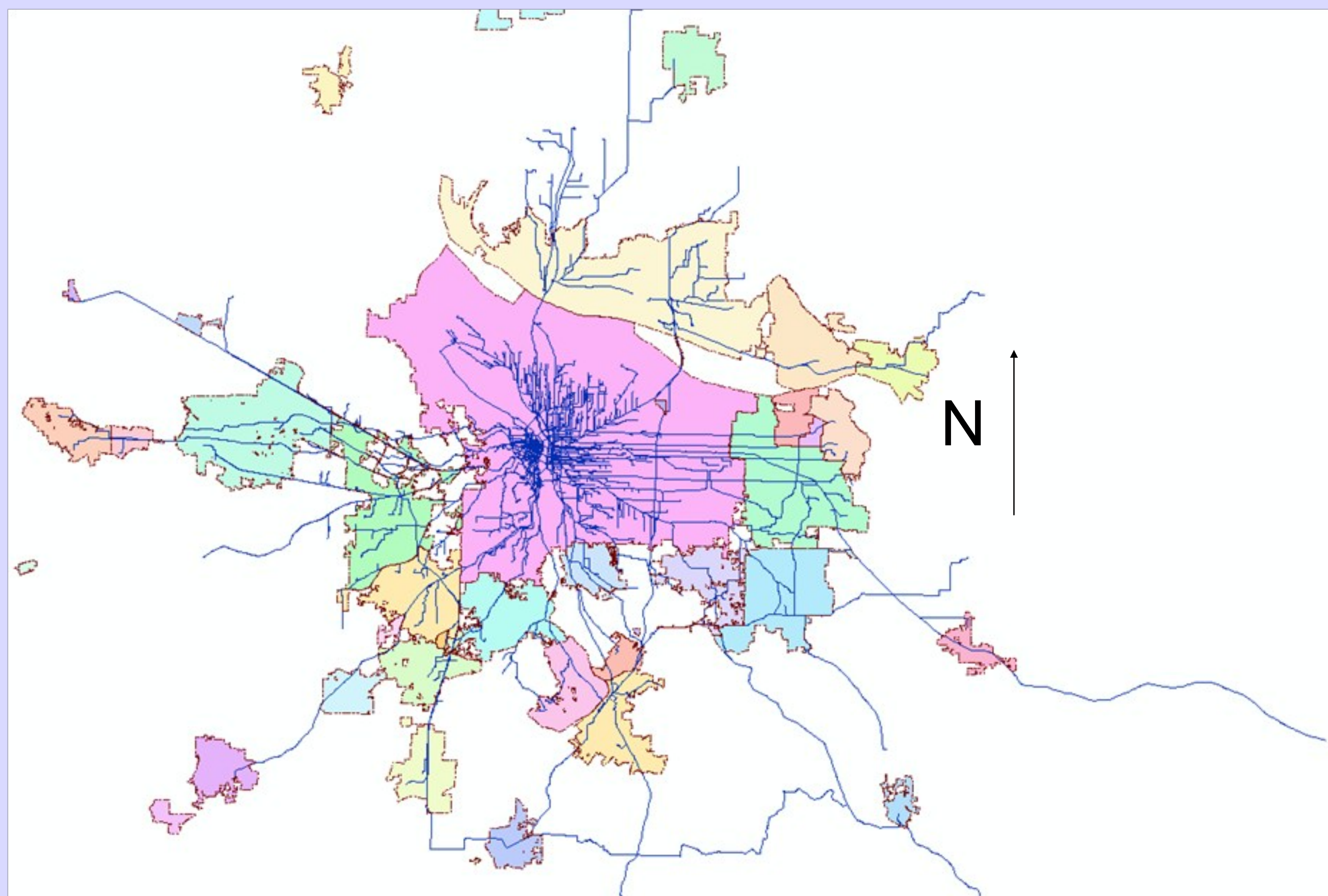


Fig. 1. Blue lines = shortest paths between respondents' home and work locations; Municipalities are shaded

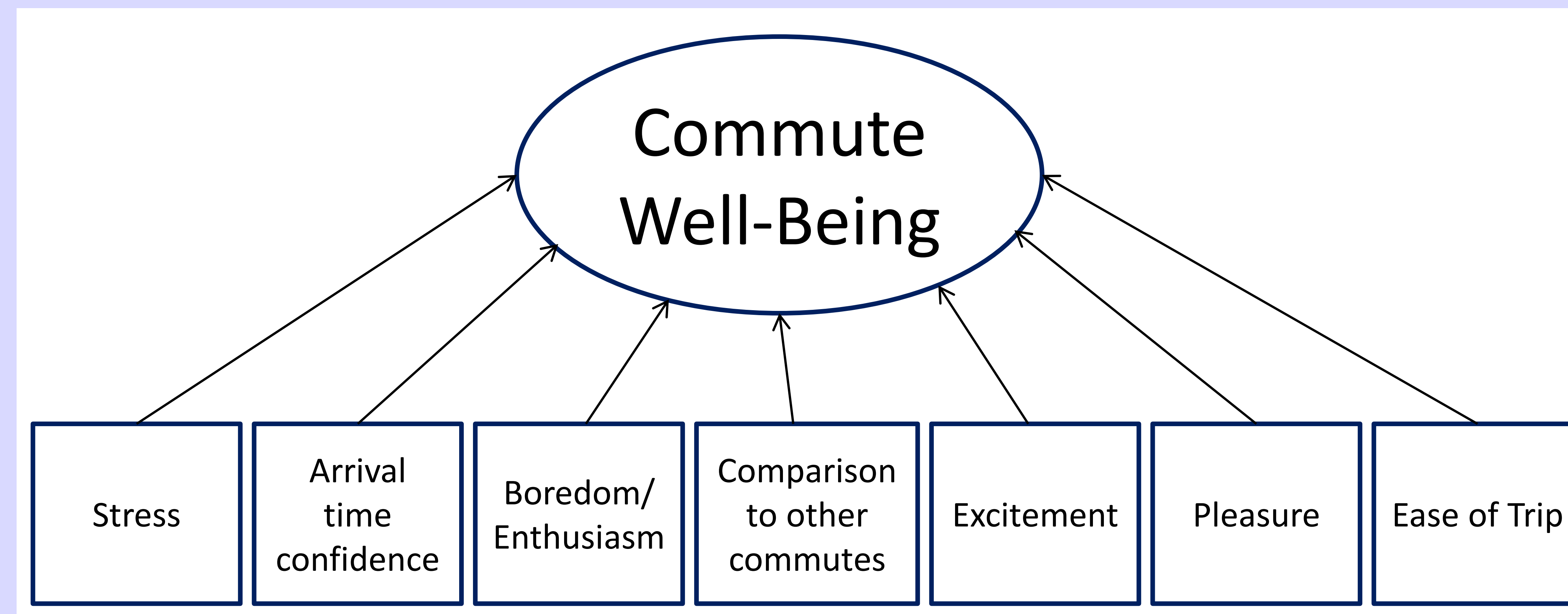


Fig. 2. The commute well-being measure and its components
Cronbach's alpha = 0.87

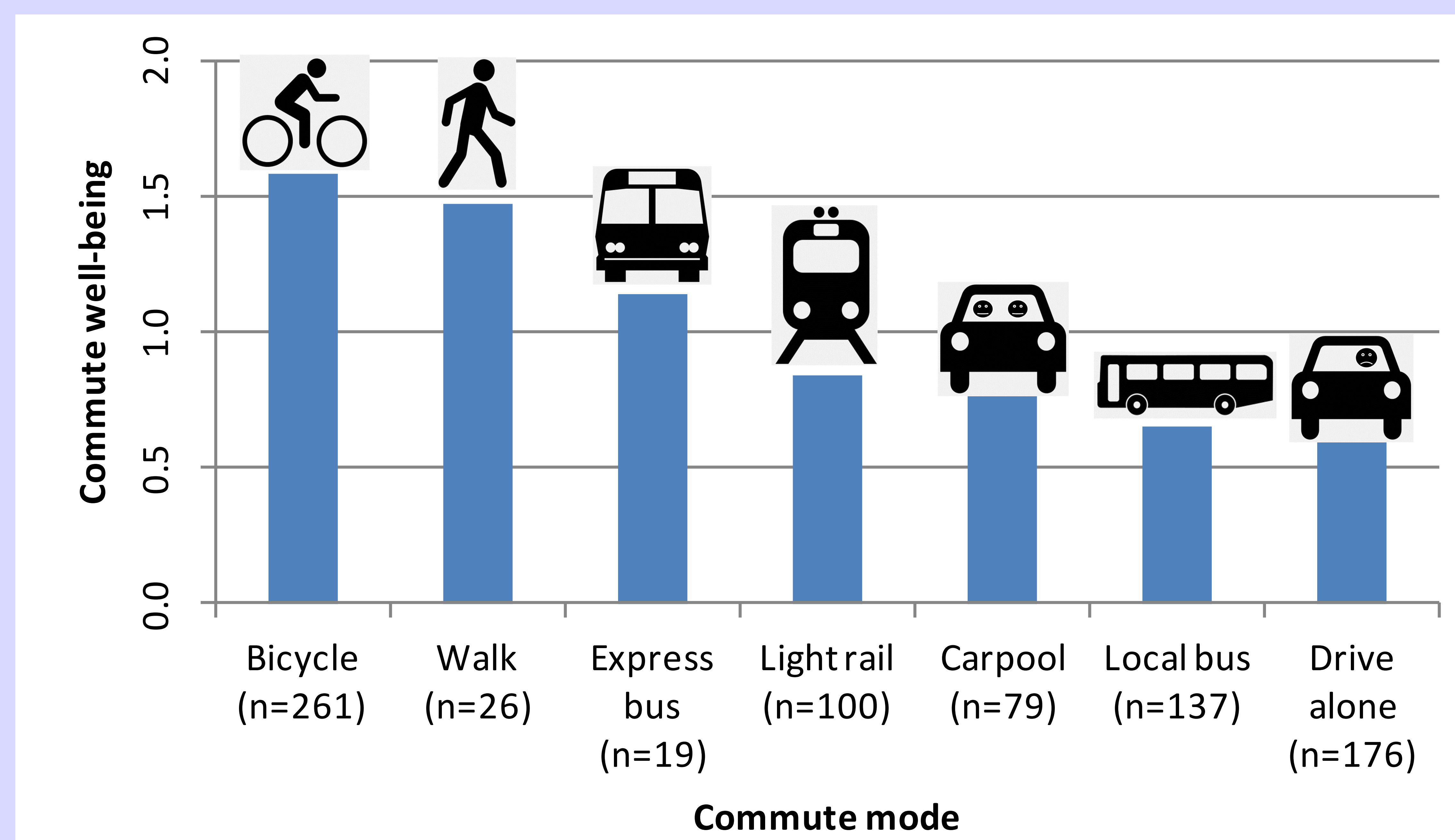


Fig. 3. Variation in commute well-being by mode

OLS Regression Summary

Positive

- Biking and walking
- High job and home satisfaction
- Very good health
- Income \$75K+
- Commute as transition time
- Use trip productively (car + transit)

Negative

- Traffic congestion (car + bus)
- Transit crowding
- Travel time > 40 min. (car)
- Safety concerns (bike)

Not significant

- Transit
- Distance
- Travel time (bike + transit)
- Congestion (bike)
- Vehicle availability
- Multimodal commuting
- Gender, race, age, education

Conclusions

Commuting to work by active modes increases commute well-being, even when controlling for distance, income, and other factors.

Traffic congestion reduces commute well-being for car and bus commuters, but not bike commuters.

Efforts to encourage greater adoption of non-motorized modes could be enhanced by noting commute happiness as a benefit of biking and walking to work.

Future research should address the relationship between commuting and overall well-being.

Measure based on

Ettema, D., et al, 2010. Satisfaction with travel and subjective well-being: Development and test of a measurement tool. *Transportation Research Part F*, 14, 3: 167-175.

Further Info

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