WOULD YOU RATHER TELEPORT OR SPEND SOME TIME COMMUTING? INVESTIGATING INDIVIDUALS TELEPORTATION PREFERENCES
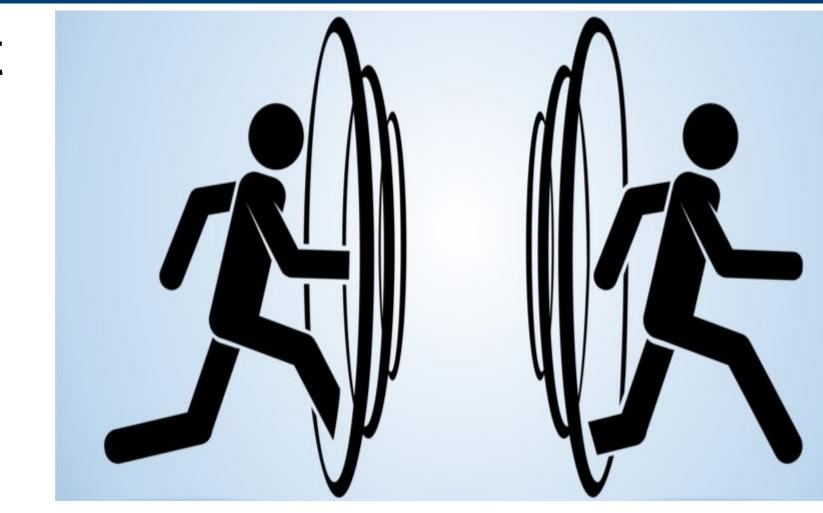
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Introduction

- **Teleportation test,** a survey instrument developed to measure Positive Utility of travel (PUT)

  "If you could snap your fingers or blink your eyes and instantaneously teleport yourself to the desired destination, would you do so"

- **"Yes"-** Regarding travel as disutility i.e. means to reach destination
  "No"- Find benefits during travel or traveling itself

Previous work

- **67-75%** of people would prefer to teleport across studies.
- Factors associated with increased teleportation preference: longer commutes, motorized modes, and age.
- Different response of people on teleportation test, ideal travel time and travel liking questions within same study
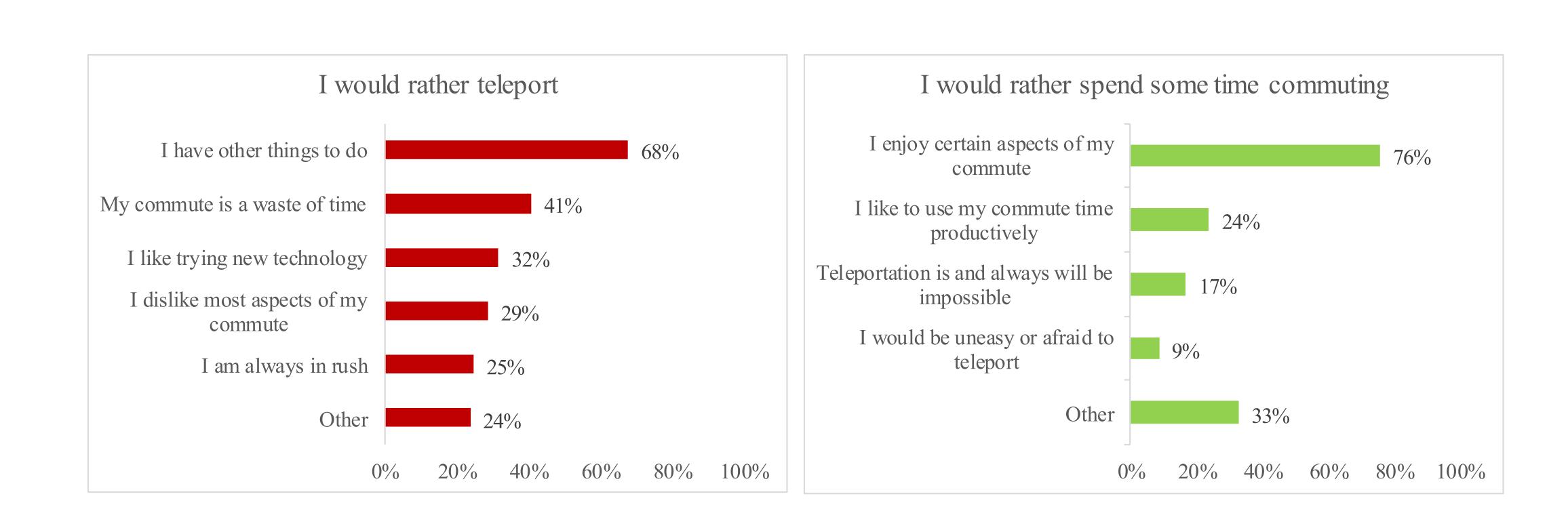
Research Questions

- How do teleportation preferences vary with sociodemographic (age, gender, race, or education), employment (work hours, flexibility), and other personal characteristics?
- Are teleportation preferences associated with transportation characteristics such as commute mode, existing and ideal travel times, and travel perceptions?
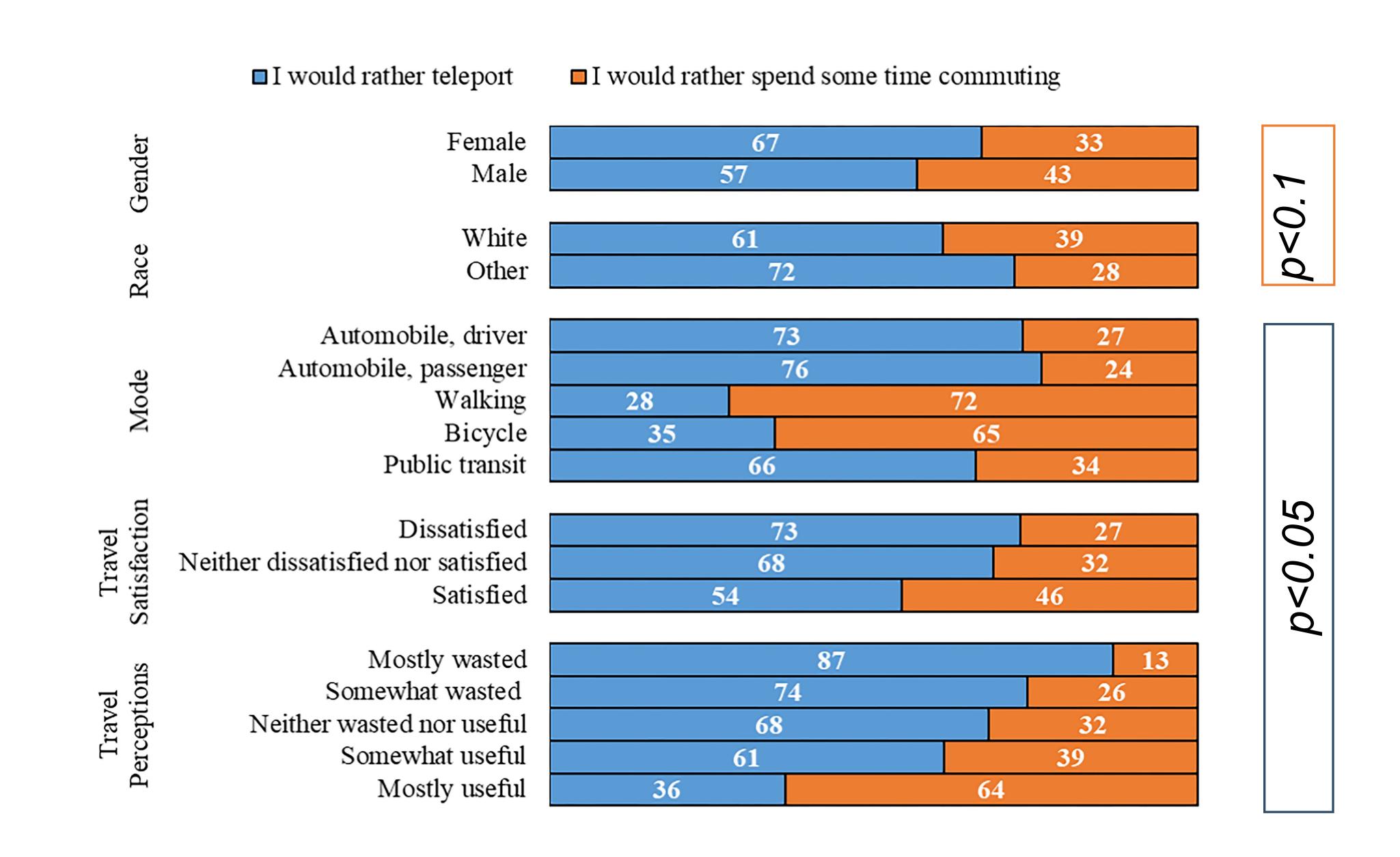- Why would people prefer to teleport? Why would people prefer to spend some time commuting?

  Data Collection: 30 min online questionnaire in Portland, Oregon. 648 complete responses.

  Information on Personal Characteristics, Travel Time, Satisfaction, Travel Liking, Recent Commute Experience
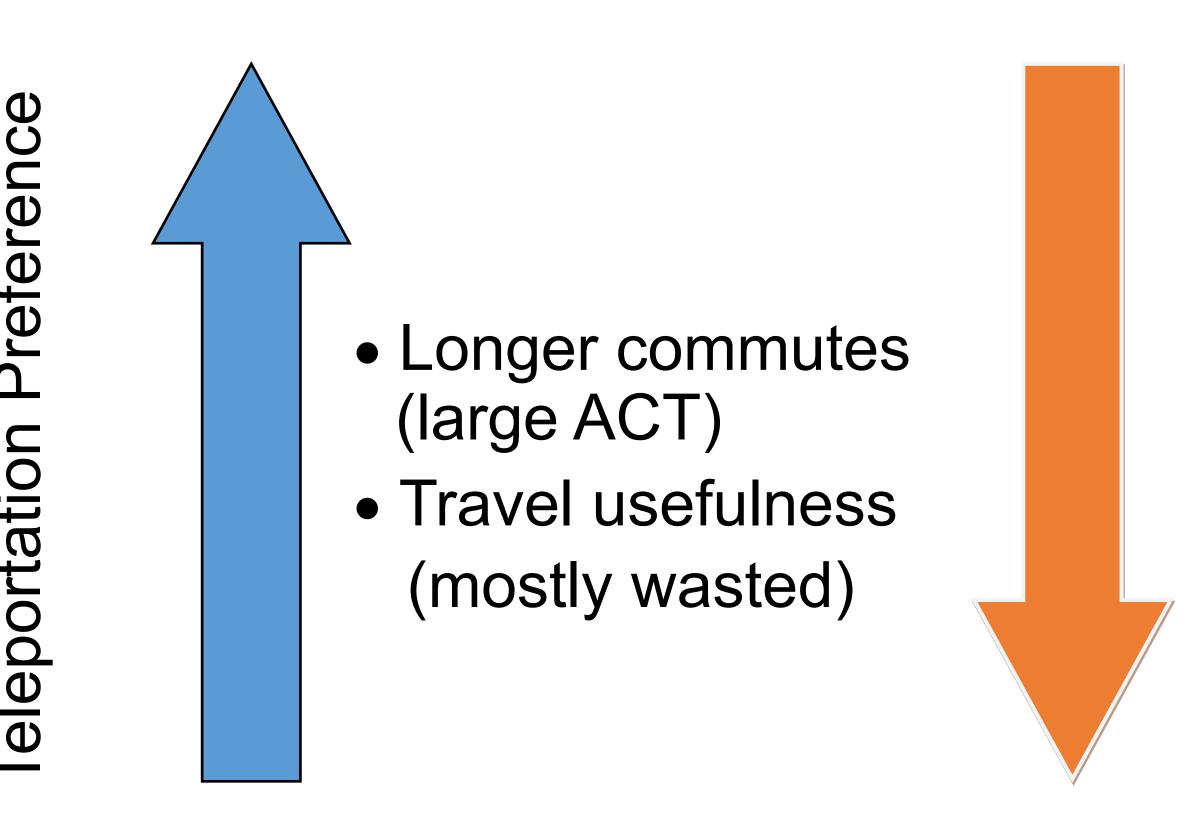
Results

I would rather teleport
- I have other things to do — 68%
- My commute is a waste of time — 41%
- I like trying new technology — 32%
- I dislike most aspects of my commute — 29%
- I am always in rush — 25%
- Other — 24%

I would rather spend some time commuting
- I enjoy certain aspects of my commute — 76%
- I like to use my commute time productively — 24%
- Teleportation is and always will be impossible — 17%
- I would be uneasy or afraid to teleport — 9%
- Other — 33%

- Other reasons for teleportation choice: *Congestion, Weather, Environmental concern, Safety*
- Other reasons for commute choice: *Physical activity, Buffer time between activities, Home-work separation*

I would rather teleport / I would rather spend some time commuting

		Teleport	Commuting
Gender	Female	67	33
	Male	57	43
Race	White	61	39
	Other	72	28
Mode	Automobile, driver	73	27
	Automobile, passenger	76	24
	Walking	28	72
	Bicycle	35	65
	Public transit	66	34
Travel Satisfaction	Dissatisfied	73	27
	Neither dissatisfied nor satisfied	68	32
	Satisfied	54	46
Travel Perceptions	Mostly wasted	87	13
	Somewhat wasted	74	26
	Neither wasted nor useful	68	32
	Somewhat useful	61	39
	Mostly useful	36	64

$p<0.1$ (Gender, Race)
$p<0.05$ (Mode, Travel Satisfaction, Travel Perceptions)

- **Three binary logit** (R^2 *values < 0.2*) models of teleportation preference revealed significant factors: mode choice, actual and ideal travel time (ACT and ICT), travel usefulness.

Teleportation Preference

(blue arrow up)
- Longer commutes (large ACT)
- Travel usefulness (mostly wasted)

(orange arrow down)
- Active mode (walking and cycling) and public transit (w.r.t auto drivers)
- Ideal travel time
- Travel usefulness (mostly useful)

Limitations

- Low R-squared values, suggesting other additional variables regarding attitudes, personality traits, etc.
- Assumptions of binary logit, linearity between log odds of dependent and independent variables.

Conclusion and Future Research

- Desire to teleport does not imply zero ideal time or travel time as wasted.
- Discrepancy in responses to ideal commute time and travel time productivity (wasted or useful) questions.
- Teleportation test is useful, but not enough to indicate the presence of utilities related to "value of travelling itself". Other PUT measures required.
- Future studies to examine non-linear relationship between teleportation preference and travel time.
- Structural Equation Models to understand relationships between teleportation preferences and other travel time perceptions.