

3rd International Conference on Future Challenges in Sustainable Urban Planning & Territorial Management

Cycling perception in urban mobility: how low bicycle infrastructure contributes to reducing sustainable transport use

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AGENDA

Introduction

Area of study

Methodology

Results

Conclusion



INTRODUCTION

- Urban mobility and traffic accidents
- Active mobility and bike-friendly cities
- Inefficient infrastructure and traffic unsafety

This paper aims to investigate
the perception of Suzano/SP
urban community about
using bicycle as a transport
mode and city infrastructure
to cycling



AREA OF STUDY

- Inefficient planning and management in cities promote hard competition among drivers on road and does not favor public transport or active mobility modes;
- Public transport and active modes are established as complementary structures for those who cannot afford their own car or for some reason decide not to have one;
- Ride a bicycle in metropolitan area without a dedicated infrastructure to practice cycling put cyclists in a danger condition;
- This paper defends that people need change the way to move in metropolitan areas, but it is necessary an infrastructure to promote the traffic safety of different transport modes and connect transport systems to favor the active mobility and public transport use.

METHODOLOGY

The research project was submitted and evaluated prior to conducting the survey by Re-search Ethics Committee of Federal Institute of São Paulo (number: 83988324.3.0000.5473).

- Case-study and data collection: Suzano city has approximately 307,429 inhabitants and the population density of 1,490.67 inhabitants km²;
- Variables and Data Analysis: Twente variables were analyzed considering the participants group “No cycling” and “Cycling”.

RESULTS

Our sample ($n = 114$) reveals that only one-fourth of respondents use bicycles for urban mobility;

There is a significant difference between gender and bicycle usage in urban mobility ($X^2 = 7.55, p < 0.05$)

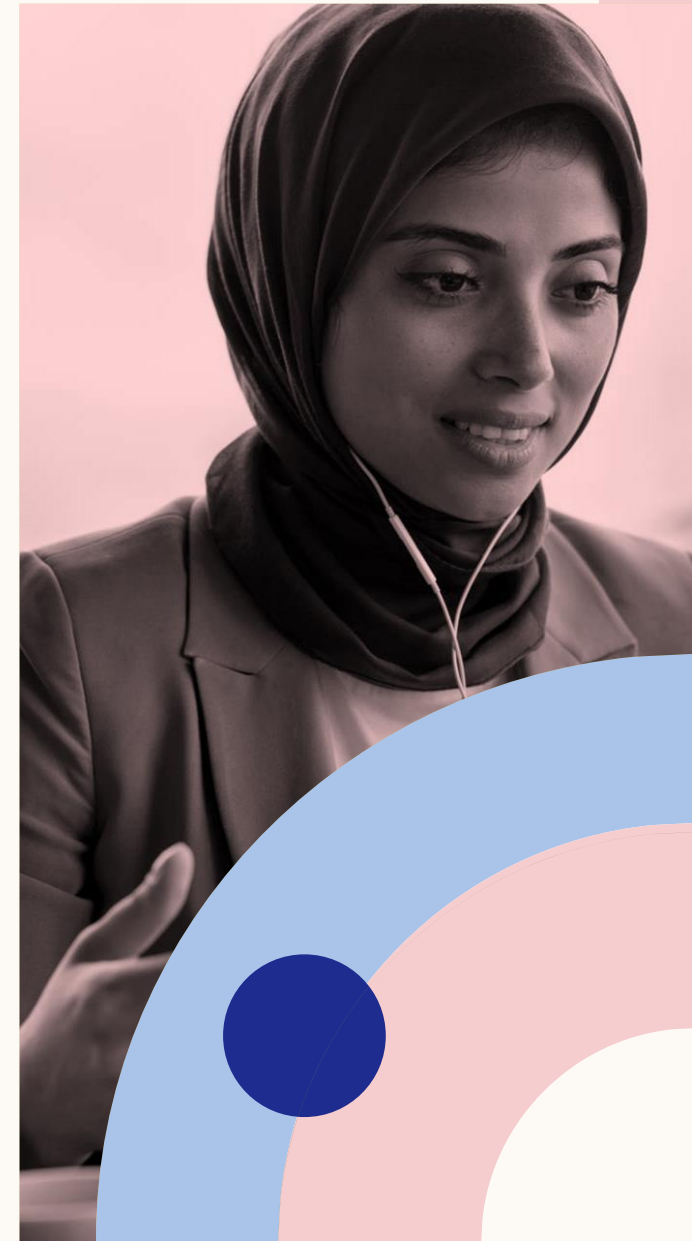
No significant difference was observed for age, education, and family income variables ($p > 0.05$)

Most participants reported that they make daily commutes (58%) to meet their needs for work, study, shopping, leisure, and access to essential services (hospitals, banks, post offices, among others).

A significant differences were observed between the main modes of transport indicated by the research participants ($X^2 = 28.45, p < 0.05$), with approximately 53.5% indicating the use of public transport as their main mode of transport, 38% car/motorcycle, 7% bicycle, and 1.5% walking.

RESULTS

Participants who did report that not cycling argue that the main reasons were that they do not feel safe due to the existing infrastructure (28%), they dislike cycling because they get sweaty, sometimes dirty, or wet when it rains (28%), 16% economic reasons (currently bicycles are expensive), 15% declare that they do not know how to ride a bicycle, and 13% not specify.



RESULTS

The evaluation of Suzano's cycling system by people who do not use bicycles, it was noted that 33% rated it as "Regular," followed by 25% who rated it as "Poor," 21% as "Very Poor," among others. This result was similar to cycle path users.

Although users stated that they do not use bicycles as a mode of transport, about 92% consider the bicycle to be a more sustainable mode of transport compared to others, and 93% consider it a healthy mode that contributes to the individual's health conditions



CONCLUSION

This study conclude that safe infrastructure is fundamental to promote cycling. Despite the fact of bicycles to be a mode of transport and cyclists have the right to use sharing roads, only experts' ones feel comfortable to make it in the middle of the traffic.

Therefore, any attempt of a city to motivate their citizens to adopt active transportation modes pass for build a reliable and safety cycling infrastructure.

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THANK YOU!

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