

Car Sharing in Germany: Main Drivers

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Introduction and Literature Review

- Transportation and the automotive industry were one of the first industries to be affected by the Sharing Economy.
- Reasons are: deficiencies in public infrastructures and the last financial crises which resulted in changes in customer behavior.
- Different transportation business models have appeared like carsharing, ridesharing and bikesharing applying different business models - B2C, P2P, non-profit cooperative - but pursuing the same philosophy: customers pay for the time the vehicles are used, the distance covered or a combination of the two.
- Car sharing services have increased in the number of participants and vehicles since their creation 20 years ago (Prieto et al., 2017)
- In 2014, Germany had 13,950 car sharing vehicles of a total of 30,920 vehicles in Europe. (Frost & Sullivan, 2014). It represents a 45.12 % of total car sharing vehicles in Europe. Nevertheless, these figures continue to be low in comparison with ownership of cars.
- Some authors have analyzed the socio-economic car sharing user's profile. In terms of gender, they have found that car sharing heavy users are predominantly male (Levine et al., 2014, Prieto et al., 2017). This seems to be the trend worldwide (Prieto et al., 2017; Shaheen et al., 2018)
- With regard to motivations, findings are mixed and inconclusive. Newer research asserted that the main motivation to use car sharing services are economic issues and convenience (Bureau de Recherche, 2014; Levine et al., 2014). Although earlier research stressed the importance of environmental issues (Belk, 2014).

Materials and methods

- A survey was conducted between November 2017 and January 2018 among Pforzheim University Students as well as users of SurveyCircle.
- 353 complete surveys were gathered mostly from people living in larger cities (100,000-600,000 inhabitants).
- SPSS v.24 was used to analyze the data.
- An in deep descriptive analysis, univariate and multivariate analyses were developed.
- Main characteristics of the sample are:

	Male	Female
Number	124	228
Age	25.5	24.22

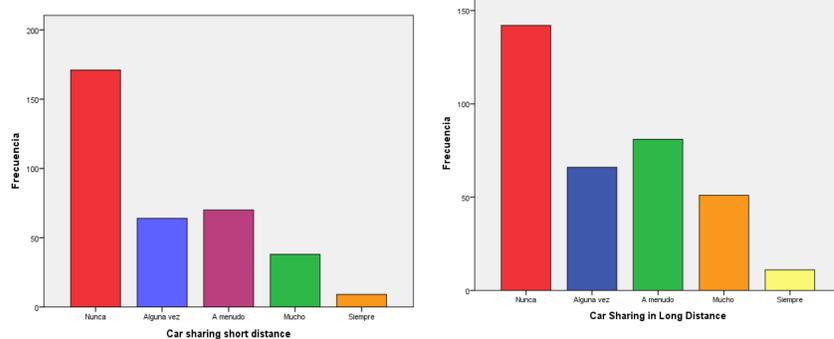
- Men are a little older than women. Overall, the sample is very young.
- Women represent 64.8% of the sample and men 35.2%.
- In order to better understand the sample behavior regarding car sharing, the sample was classified according to age below and above the mean. The mean for age is 24.42 years.
- Age above the mean represents 39.4% of the sample and age below the mean represents 60.3%.

Findings

People in big cities in Germany have different vision on car sharing use than people in big cities where car sharing is widely deployed. Car Sharing use is small outside metropolitan areas. One possible reason is that public transport is well developed to fulfill peoples needs Another reason could be that people stick with the idea that an own car is the best solution for mobility.

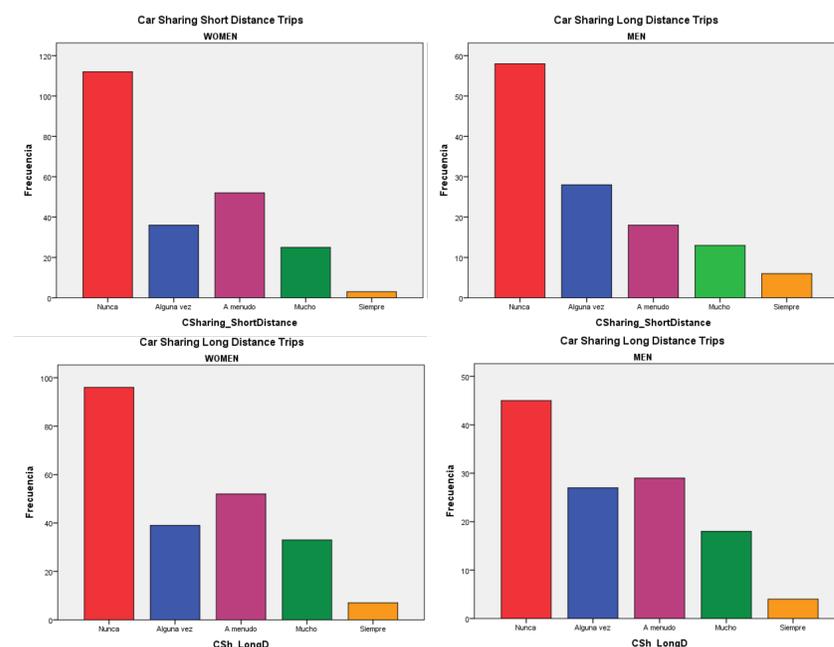
Results

Use of car sharing (full sample):



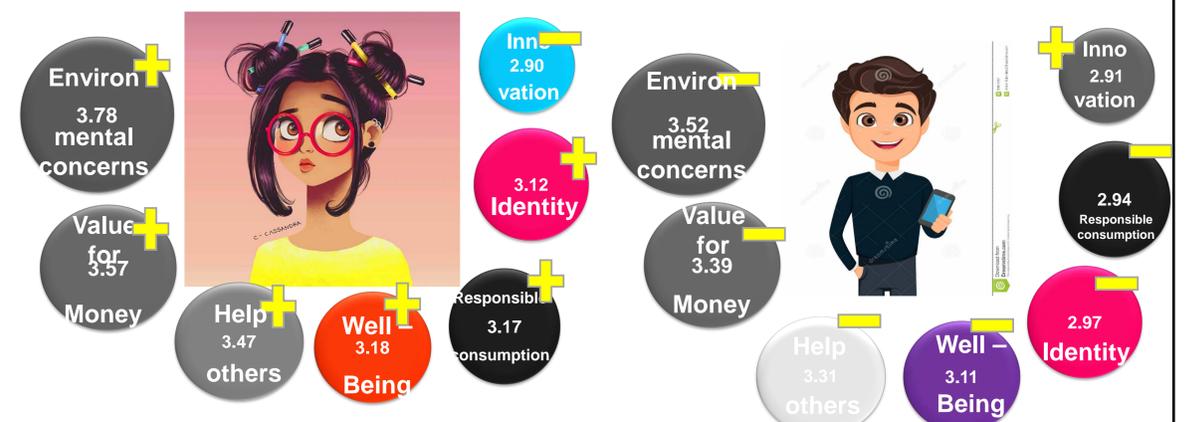
- Regardless of type of car sharing (short or long distance), most respondents never used car sharing.
- Spearman Correlations show that people who use car sharing in long distance trips also use car sharing in short distance. Thus, these variables are correlated.

Use of Car Sharing by gender (full sample):



- In short distance trips men used more car sharing than women in the categories "always" and "sometimes".
- The share of men never using car sharing is lower than women.
- In car sharing use in long distance trips, men use more car sharing than women in all categories of response.
- Thus, the first response is never to use car sharing in both men and women, very close to the middle of the sample.
- Nevertheless when car sharing users are studied, men use it more than women, especially for long trips.

Reasons to employ Car Sharing by gender:



- The most selected choice is never to use car sharing neither short distance nor long distance
- The most important reason to use car sharing for both, men and women, are environmental concerns, value for money is also an important reason.
- There are significant differences among men and women, women obtained higher values in all dimensions with the exception of innovation.
- ANOVA shows significant differences among valuations among men and women.

Literature cited

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Acknowledgments

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