

Women's Constrained Travel Behavior

Austrian Case Study



Photo: PxHere

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Above: The Vienna U-Bahn station in Austria. A new study examines the situations women encounter in traveling and how behavior is modified in response.

Fear about personal safety on different modes of transportation—and traveling to and from these different modes—is a significant issue for children, the elderly, persons with disabilities, ethnic and racial minorities, and women. This article focuses on safety issues specific to women.

Safety-related risk perception can impede travel patterns as well as the intention to travel independently. Constrained travel behavior can be expressed in a variety of ways; for example, women may avoid certain trips and travel modes and might change their destinations and routes (1). Those behavioral adaptations can be dependent on the time of day; more specifically, they often are based on lighting conditions, not only daylight but also artificial light in buildings. To cope with fear

and to increase perceived safety, women sometimes employ a strategy of “arming measures,” which includes carrying items for self-defense, such as pepper spray, pocket alarms, or knives; holding or using a mobile phone while walking alone; or attending a self-defense course.



Photo: Tom Page, Flickr

Women often avoid travel modes in which lighting may not be adequate, both outside at night and inside building and transit stations.

Methodology

The constrained travel behavior of women still is an underresearched topic. Few studies have quantified the impacts of fear and personal safety on different modes of transportation. An Austrian study investigated how the situations that women had faced in their everyday mobility, such as harassment and assaults, had affected their travel behavior (2; see box below).

To investigate how women's mobility is affected, researchers used the term "frightening situations" to describe the experiences that caused women to alter their travel behavior. It must be stated that objectively similar situations can, of course, cause different impacts; therefore the objective seriousness of an incident was not really relevant for this study. In 2012 and 2013, 402 interviews were conducted via two telephone surveys to investigate the degree of constraint in the travel behavior of women in Austria.

The researchers' main objective was to assess how many women experienced frightening situations while traveling; the locations and circumstances of those situations; and, if applicable, women's responses. The first survey was an exploratory study to identify what kind of situations took place and where. The second survey mainly addressed the proportion of women who experienced frightening situations.

The questionnaires consisted of three parts. The first part included general questions like sociodemographic characteristics, the respondent's self-reported general communicativeness and anxiety levels, and screening questions to identify if women were affected. Whether or not they had experienced frightening situations in their everyday mobility, respondents reported individual safety precautions they have taken, such as avoiding certain walking routes, and whether they changed their travel modes based on the time of day.

NOTE: This article presents an excerpt of study results. It is based on the authors' 2018 paper, "Women's everyday mobility: Frightening situations and their impacts on travel behaviour" (2).



Photo: Yuan, Flickr

An Austrian survey on mobility behavior examined how many women had experienced frightening situations on transit.

The second part included questions about the situations, including the environment, the travel modes used, and the time of day. The final part of the questionnaire was directed only at women who had experienced a frightening situation and included questions on changes in their travel habits based on the frightening situations they had experienced.

Results

The results showed that, overall, one-third of women had experienced frightening situations while traveling. Among these women, 13% had experienced one situa-

tion and 21% had experienced between two and five situations. These results may not be generalizable, however. A much older study in the United Kingdom revealed that 31% of respondents had been harassed and that about one-quarter had been harassed more than once (3).

In further analysis, 171 frightening situations were broken up into 230 subactions that then took place; for example, if a woman experienced both a verbal harassment and an attempted assault (Figure 1, below). Most of those incidents included verbal (42%) and nonverbal (20%) harassment; followed by attempted assaults (16%);

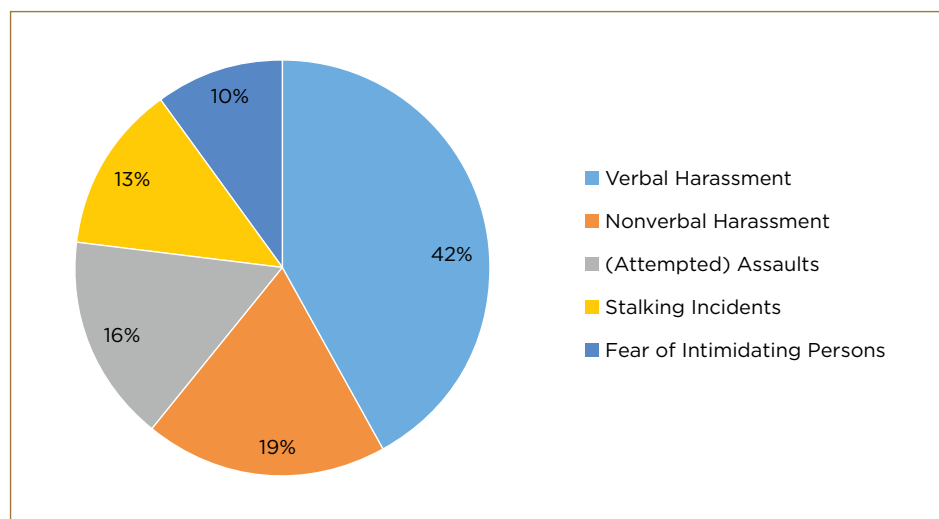


FIGURE 1 Frightening situations experienced by women. (N = 230 subactions of 171 incidents.)

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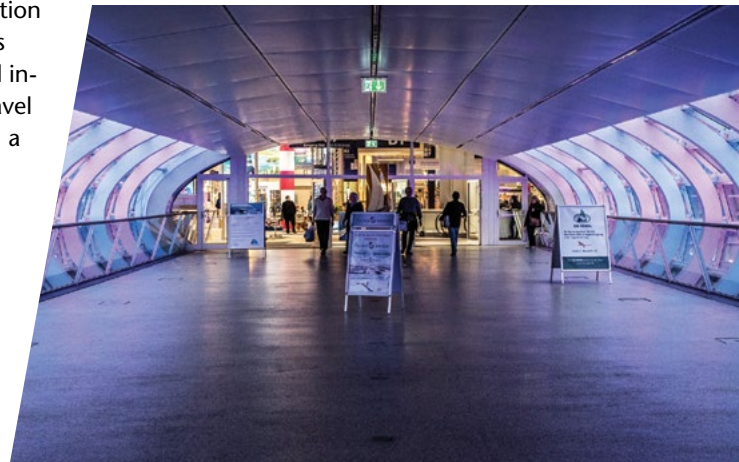


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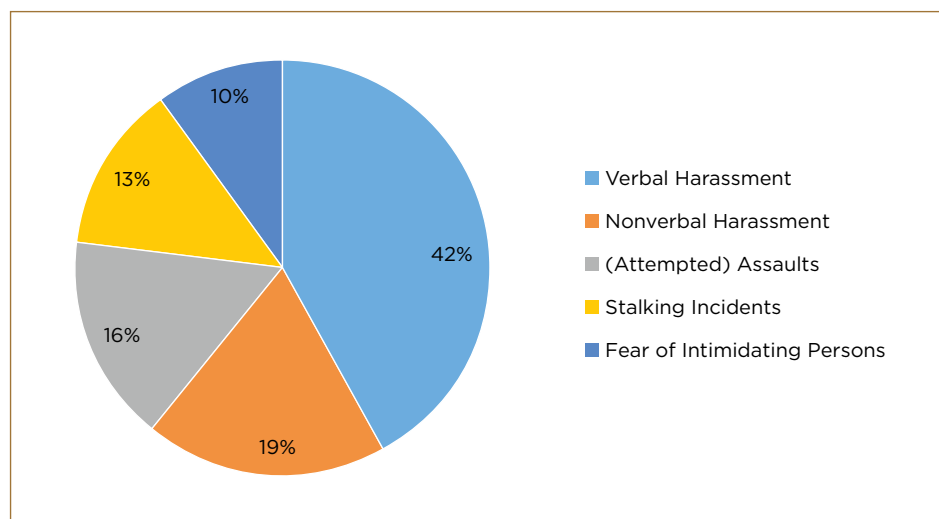


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stalking (12%); or the fear of intimidating persons, that is, fights at public transport stops, groups of intoxicated persons in the metro, or men approaching on a deserted street (10%).

Some of the reported situations occurred inside vehicles (27% of all situations), but the majority (73%) occurred outside vehicles; 36% of situations occurred within the urban area. In most cases, women were walking at the time of the incident; the next most common thing women were doing at the time of the incident was riding on public transit. Other persons were present in half of the cases; a high proportion of incidents happened inside crowded vehicles.

The results showed that most respondents regularly take precautions when traveling, avoiding routes, stations and destinations, and travel modes, to try and prevent frightening situations. The share of women taking at least one arming measure was significantly higher if the respondent had already experienced a frightening situation (96%) compared with women who had not experienced

one (78%), and this share varied depending on the time of the day.

In total, 75% of all women who had been affected by frightening situations avoided certain routes or destinations, such as spaces with dim lighting and underground car parks and railway stations. The avoidance of specific travel modes is not as widespread, but 39% of affected women and 16% of nonaffected women try to avoid specific modes of transportation—mainly public transit, specifically subways, railways, trams, and buses. The results suggest that the percentage of women who avoid specific travel modes, always or at least partly dependent on the time of day, doubled among women who had had negative experiences while traveling.

Other modes, such as bicycles, taxis, and cars received fewer mentions; traveling inside a vehicle or on a bicycle creates less exposure to potential offenders (2). This also is supported by the finding that women feel less vulnerable riding a bicycle than walking in darkness, presumably because of the higher velocity and because they can keep away from sidewalks.



Photo: FaceMePLS, Flickr

According to the Austrian study, fewer negative experiences occur on modes with less exposure to potential offenders, such as riding a bicycle or driving a car.

Conclusion

The Austrian case study confirms that women in general have constrained travel behavior because of fear for their personal safety. When it is not possible to change the travel route or the travel time, or when no other transport mode is available, women feel that they must use less desirable transportation options—even if it means they may encounter frightening situations.

Women's sense of personal security plays an important role in their travel behavior. The share of women affected by frightening situations while traveling translates to unequal mobility opportunities that can result in social exclusion. Because, as suggested in Armitage and Gamman (4), personal safety and fear of crime is one of the main components for sustainability frameworks, safe environments in which all people can move about freely and without fear are essential.

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Photo: Alper Cugun, Flickr

Surveys showed that a high portion of frightening situations occurred inside crowded transit vehicles.

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