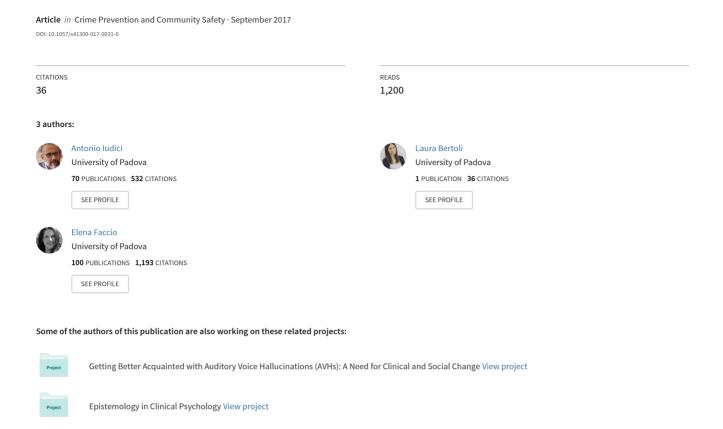
# The 'invisible' needs of women with disabilities in transportation systems





#### ORIGINAL ARTICLE

# The 'invisible' needs of women with disabilities in transportation systems

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**Abstract** Women with disabilities are among those who suffer most from sexual assault in transit environments. This paper offers a review of international literature concerning women's victimisation and safety in transit environments with focus on (a) the concept of vulnerability, (b) data on victimisation in transport systems, (c) the perspective of criminals who target women with disabilities and (d) prevention policies and intervention strategies.

 $\textbf{Keywords} \ \ \text{Disability} \cdot \text{Victimisation} \cdot \text{Mobility} \cdot \text{Vulnerability} \cdot \text{Crime} \cdot \text{Security} \cdot \text{Women}$ 

#### Introduction

Public transportation is one of the most important tools to help create a more sustainable society (Cohen 2006; Steg and Gifford 2007), the goals of which include decreased pollution, increased business opportunities and greater social cohesion, especially for those who might not otherwise be able to get around. But perhaps most importantly, the sites involved in transport systems (streets, bus stops, underground and railroad stations, car parks, waiting rooms, elevators, airports) are environments that, if planned to be safe, can encourage person to person interaction. However, a lack of security in these spaces and concerns about personal safety can seriously limit mobility (Ingalls et al. 1994). Such fears are then heightened by the type of violence and crime that tends to occur in vehicles or at transportation sites (Morgan and Smith 2006).

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Those hit the hardest are generally people who rely on transit as an essential means of social integration. This includes people with disabilities, who may experience a domino effect of problems such as deterioration of their health, compromised ability to live independently and reduced access to community services (Powers and Oschwald 2004). The situation is especially critical for women with disabilities, often the target of sex offenders who take advantage of the environments often found on or near public transportation, like overcrowding and an absence of monitoring (Clarke et al. 2009).

Crime, therefore, leads to insecurity. The mere perception of insecurity leads women with disabilities to constantly reorganise their lives to reduce danger, for example, by taking longer routes or leaving work early (WHO 2001). Nevertheless, the vulnerability of women with disabilities should not be understood only as an effect of violence but also as a 'cause' of disability itself. For this reason, this article focuses on providing a variety of perspectives on disability and safety, considering, for example, older individuals with disabling health problems, pregnant women and migrant living in a rural area. The goal of this study is to analyse the literature by discussing (a) the concept of vulnerability, (b) data on victimisation in transport systems, (c) the perspective of criminals who target women with disabilities and (d) prevention policies and intervention strategies.

In this article, the term 'women with disabilities' is understood to mean women with physical or psychological impairments, actual or perceived, who experience social exclusion resulting in increased disability. It follows that both the individual impairment and the social environment are jointly sufficient causes of limitation. In this sense, disability is seen as a product of both health and social conditions (UN 2006), which is also compatible with disability studies (Barton et al. 2002).

In the transit environment, while not directly related to disabilities, we have used Ribbonaar and Verster's (2004) definition of 'Special Needs Passengers' (SNP) for certain considerations. The authors use the term to describe anyone who may have difficulties with mobility (pregnant women, injured people, women with congenital problems and customers carrying shopping bags). Such citizens risk giving up work and educational opportunities, limiting their own independence. Most of the literature discussed here is based on evidence from case studies from around the world.

#### Method and data

This study uses qualitative research as we wanted to explore a poorly known topic: the lives of people, and more specifically women with disabilities as they navigate public transit systems. In line with Creswell (2013), we have followed the procedures relevant to the study of literature in the field of qualitative research: the use of general keywords, the identification of a research topic (women with disabilities in public transportation), and the definition of concept maps (circles of intersection between different themes and processes).

Given the complexity of the topic, we chose a revision that allowed us to build 'bridges between the issues', breaking the overall theme down into subconcepts, as



shown (Creswell 2013). The literature review was done through the following online databases: Scopus, PsycINFO and Google Scholar, searching by abstract and contents for the period of 1980–2016. The final criteria used were: (a) indexed articles or book chapters, (b) works in English, (c) peer-reviewed publications and (d) the following terms: 'Women with disability', 'victimisation', 'safety' and 'mobility'. In total, 145 studies were considered pertinent, and of those, 39 were excluded due to infrequency of the key terms. The authors of this work oversaw the selection process, which took place in three stages. First, the articles were analysed with respect to the inclusion criteria; second, the documents were assessed in terms of their title and abstract; and third, they were directly acquired.

The tasks were divided into the following categories: individual or social vulnerability, victimisation in mobility/transport locations, the criminal's perspective on women with disabilities and management policies and strategies for intervention. For the last category, we also referenced documents acquired from institutional websites, international agencies (WHO, etc.) and those of regional, government and non-government offices. This material was analysed according to 'defining document analysis', the systematic procedure for reviewing or evaluating specific institutional documents (Rapley 2008). Like other analytic methods of qualitative research, the document analysis required that the data be examined and the interpretation be performed in a way that would obtain meaning, provide understanding and develop empirical knowledge (Denzin and Lincoln 2008).

# Vulnerable individuals or 'disabling' transit environments?

The concept of vulnerability is part of public perception and is often used by institutions and professionals in discussing disabled individuals and transit sites. An individual is considered 'vulnerable' when (s)he needs or might need community assistance and, because of a disability or mental or physical illness, (s)he cannot care for her/himself or defend her/himself from exploitation or possible significant harm (Lord Chancellor's Department 1997). Women with disabilities are often labelled as vulnerable, although this association is frequently debated in scientific circles. Current literature is divided between studies that consider vulnerability a dysfunction in and of itself and those which consider it a product of society. In the former, disability is conceptualised as a functional limitation. The assumption is that a person is 'deactivated' or unable to function because of his/her impairment. Disability is considered a divergence between a person's abilities and the requirements of the environment (Goodall 1995; Scullion 1999; Wendell 2001; Lutz and Bowers 2003).

If on the one hand this concept allows for certain kinds of protection, on the other, what Dave Hingsburger calls 'the prison of protection' has been built, with implications of restricting rather than expanding individual liberty, justifying dependence on caregivers and, in particular, emphasising the difference between normally abled and victimised persons (Hingsburger 1995). For some authors, claiming that a woman with a disability is vulnerable because of that disability means reinforcing the idea that vulnerability is an inherent, immutable characteristic of the woman herself, thus giving rise to prejudice, discrimination and a



medicalisation of the entire person (Wendell 2001; Michalko 2002; Sin et al. 2009; Campbell and Oliver 2013). Barnes and Mercer (2003) argue that this degrading approach to disability has led to policies and attitudes that have made 'vulnerability', and the dependence resulting from it, a reality.

Environmental and behavioural barriers also play a role in making those who do not see, hear or walk, or those who cannot behave in ways deemed appropriate, into 'the disabled'. From this perspective, all different types of disability are socially constructed. In reference to our study, we focused, therefore, on an individual's transportation conditions and the inclusive value that we attribute to these conditions, rather than on personal dysfunctions.

## Victimisation of women with disabilities in transportation systems and health: international evidence

Although the phenomenon is not terribly transparent and is largely unexplored, the data from research and institutions are generally agreed upon: women with disabilities are more often the subjects of sexual crimes and harassment (Hughes 2003). Estimates tell us that 30–50% of women with disabilities in the US population have suffered some form of violence and that women with intellectual disabilities are those most often exposed to violence (Anderson 2003).

Using data from the US General Social Survey (GSS) and the United Nations, Perreault (2009) shows that more than 70% of women with developmental disabilities are sexually assaulted, a rate that is 50% higher with respect to women without that category of disability. Powers and Oschwald (2004) studied 200 women with cognitive and physical disabilities: 67% of the women reported having suffered physical abuse and 53% of the women reported suffering sexual abuse. These rates of physical and sexual abuse are about double those usually found among non-disabled women (Hague et al. 2008).

In a study on mobility conducted by Beadle-Brown et al. (2014) which looks at a sample of 116 people with disabilities in the UK, those interviewed said they had experienced unpleasant situations: 35% taking place while walking in the street, 28% in or around their homes and 28% in streets near their homes. A quarter of respondents reported critical situations on public transport, and 28% said that they occurred in general public places.

High levels of fear of crime among women and the elderly are often attributed to their feelings of physical vulnerability (Gibson et al. 2002). In general, research shows that crime victims tend to express more fear of crime than non-victims (Skogan and Maxfield 1981).

Certain conditions in transportation can lead to criminal acts, such as overcrowding during peak hours and a lack of constant monitoring (Smith and Clarke 2000), time spent waiting at bus stops (Clarke 1996), travel with a sparse onboard staff, stops without security personnel (Millie 2008) and inadequate lighting during night-time hours (Loukaitou-Sideris 2011).

Harassment happens in different ways: rubbing, sexual gestures, direct or indirect advances, seductive approaches and suspicious overtures that were not welcomed



and rejected (Sin et al. 2009). Other unwanted actions include making disparaging sexual comments, interfering with bodily movements, intrusive questioning, invasions of personal space, offensive remarks, vulgar and sexist jokes, obscene gestures or unwanted contact (Granville and Campbell-Jack 2005; Hsu 2011).

In general, designing transport systems based on the needs of women with disabilities is an essential requirement for reducing victimisation, and it affects the ability to rise out of poverty (Mwachofi 2009) and get access to work (Mondéjar-Jiménez et al. 2009); to participate in leisure, educational and hobby activities (Umb-Carlsson and Sonnander 2006); to make full use of transport (Prasertsubpakij and Nitivattananon 2012); to enjoy the social cohesion that counteracts antisocial behaviours (Moore 2010); and to promote health, including that of women with disabilities who live in rural areas, where public transport may be lacking (Mattson 2011).

The literature extends also to countries of the Global South and elsewhere. In reference to the relationship between disabled women, transportation and health, two studies performed in rural areas of Ghana (Naami et al. 2012; Ganle et al. 2016) show how a lack of access to public transport has direct consequences on the health of mothers and children, on employment and on companies themselves. In studying the role the environment plays in the construction of disability, Clarke et al. (2009) found that, after 15 years of work, less-educated women have a greater chance of becoming disabled, the presence of a single chronic health condition doubles the rate of disability and those who live in areas characterised by motorised travel are almost twice as likely to experience disability. In Hong Kong, a synergistic project between interested parties was done (Li 2016) and in Australia, extending the concept of 'mobilities of care' by combining an intersectional understanding of the transport task with the principles embodied in the child-friendly cities agenda (Grant-Smith et al. 2016).

### The criminal's perspective on women with disabilities

According to Petersilia (2001), when one group is targeted more often than another and its members systematically turned into crime victims, three conditions are usually present: (a) the members of the group are more frequently exposed to motivated attackers (due to proximity); (b) the members of the group are more 'attractive' targets as they allow for a greater 'yield' for the offenders (e.g. easy sex); and (c) the members of the group are more approachable or have fewer defences (lack of protection or access to justice). Women with disabilities meet all three conditions. The principle factors that lead to criminal acts against women with disabilities are:

#### Real or perceived vulnerability

People with disabilities have real or perceived vulnerabilities, especially with regard to those with visible impairments or learning disabilities (Sin et al. 2009). The fact that some disabilities or 'handicaps' stand out more has been presented as a reason



why those with them are at greater risk of targeted violence and hostility (Hunter et al. 2007). In many cases, predators choose people with developmental disabilities as victims because of their image as 'vulnerable'. Thus, the perception of an obvious disability increases the idea of vulnerability, and this can prompt victimising actions. In essence, an 'attractive' victim is someone who appears vulnerable in the eyes of the perpetrator.

#### Threat perception expressed via forms of hostility

Criminals base these threats on the victims' fear of suffering consequences for reporting crimes. For example, some women fear losing privileges, being subjected to restrictions, not being able to make use of transport services or being moved to a facility (Crips et al. 2000). Offenders know that their victims feel constrained, both emotionally and financially (Waxman 1991). The literature considers that the lack of public education and media discussions which negatively portray women with disabilities can foster discriminatory attitudes towards them (Ward 1997).

#### Presumption of impunity

Criminals may also perceive women with disabilities as 'lesser' persons and may think they can get away with their actions (Sin et al. 2009). Women with disabilities are often at high risk of sexual violence and assault by those who target them in order to demonstrate their power, control and authority (Mandl et al. 2014). The presumption of going scot-free is supported by blackmail and manipulations that the criminals bring to bear to keep everything secret. Delinquents know very well that many women with disabilities may feel shame in making their experiences public (Carlson 1997). Victims are often afraid of having imagined or misinterpreted what happened, sometimes even stopping in the middle of making a report. This leaves some women with disabilities in a constant state of weakness, because those who seek to commit crimes learn how to do so without fear of suffering the consequences (Petersilia 2009).

#### Prejudices against women with disabilities

False beliefs and stereotypes are motivations for acting violently towards women with disabilities. One still-widespread point of view in many societies is that women and girls with disabilities are 'asexual'. A lack of sex education can result in some victims not knowing their boundaries and thus accepting a number of improper behaviours (Mandl et al. 2014). Some criminals justify violence by claiming to believe that the disabled have no awareness and do not feel pain and suffering (Calderbank 2000).

# Prevention policies and strategies for intervention

Although attention to crimes in transit environments suffered by women with disabilities has increased in recent years, its prevention still has yet to attract much attention in the international literature (Ceccato and Newton 2015). The complexity



of a phenomenon that has been largely hidden from sight makes it difficult to understand its exact scope. There is, nonetheless, an acknowledgement that only collaboration between different disciplines (social and political sciences, criminology, architecture) and between the various relevant agencies (associations and organisations that represent people with disabilities, and legal and social services) will provide better approaches to the problem.

From all this, it follows that mobility in relation to those with a disability is not an isolated process, nor can it be assigned only to a single sector, such as transportation systems. This implies different actions involving institutions, services and the entire community and requires an intersectional approach, one that interrelates various factors (gender, employment, housing) and involves different types of users with different identities (those who self-identify as disabled, elderly and pregnant women and those with children).

Beginning with international research and relevant statutes, the necessity arises to counteract violence in mobility through a global approach along specific strategic lines that include certain legislative, social and research conditions (Iudici 2015).

In terms of legislation solutions, these crimes are difficult to prevent, as various entities have indicated. Serious incidents do involve reports to the authorities, but the problem is that reporting is also made for a wide range of offences: abuse, harassment, injuries. More difficult to discern, however, is the subset of these crimes that affect specific and special conditions as they relate to the victim. A possible crime-preventing solution could be the creation of a reporting tool that passes from a macrodefinition of crime to one that offers a wider grasp of its methods. Another legislative solution could be to redefine the 'legal capacity' of people with disabilities as a function of the definitions established by the UN Convention, which requires signatories to introduce legal reforms that recognise the dignity and integrity of people with disabilities as a fundamental, inviolable right. Yet another solution could be recognising disability as an issue that intersects with policies affecting women, applying this to transit crimes. An important guideline on the practical level may come from the definition provided by the Crown Prosecution Service, that is, 'any criminal offence, which is perceived, by the victim or any other person, to be motivated by hostility or prejudice based on a person's disability or perceived disability'. This allows for criminals to be intercepted regardless of the actual commission of the crime.

In terms of community intervention, the literature reports experiences indicating the need to develop permanent collaboration between transportation agencies and government services so they act jointly. For example, legal personnel conducting investigations could map the places where the crimes were committed. Those responsible for security could then monitor these places using various tools, such as formal or informal surveillance (Macy 2009). Regarding those in charge of transportation, it has been noted that the behaviour of transportation staff may affect women's perception of security (Ahmad 2015), so staff training can certainly be one of their responsibilities. In collaboration with social services and centres working with disability issues, these groups could also jointly plan training courses for social workers and service personnel. The goal could be helping them recognise whether transit riders have suffered from violence or to intervene in problematic situations



seen on public transport. Training courses could certainly also be created for women with disabilities in order to develop skills for facing criminals (with the help of criminologists); take measures to develop individual or group empowerment, as done in Bangladesh (Quinn et al. 2016), to improve the health of women with disabilities (with the help of social educators or sociologist); teach how to distinguish troublemakers or sexual predators from other people (Lumley and Miltenberger 1997) (with the help of psychologists) as well as develop the potential victim's ability to flee (Miltenberger et al. 1999).

Transportation authorities could form partnerships with agencies working on disability issues and share its strategies to attain visibility for changes made to improve security. Both transportation agencies and centres for people with disabilities could strengthen their services to take reports from disabled users and use legal the tools available for fighting crime. Given that most facilities and transport systems were planned without considering the experiences of disabled women, and that safety perception studies were not considered either (Haniff-Cleofas and Khedr 2005), architects could certainly design spaces and environments to reduce the risk of assault. In general terms, it would be useful to introduce themes and materials regarding gender equality (Madan and Nalla 2016), discrimination, prejudices about diversity and the importance of self-determination to training programmes, following the example set by Australia (de Vet et al. 2012).

In terms of research, it is important to recognise that a study on people with disabilities that is done without the involvement of those same people is bound to be severely limited. Michael Masutha and William Rowland, two South African activists, have said, 'Nothing about us without us!' Therefore, involving individuals with disabilities in research (Walker et al. 2015) can also foster greater awareness of the risks they encounter as well as the most suitable strategies for eliminating them.

Moreover, it may be useful to investigate the representations regarding transit trips and locations with respect to the perception of danger and safety, and it is essential to research how threats are experienced, what effect they have on safety and travel, how women handle such situations and what help they want (Hughes 2003). It is also vital to identify which kinds of disabilities are more at risk and which tools could be used by affected populations to protect themselves from crime. Finally, an inquiry could certainly be developed into the mind-set of criminals ready to exploit vulnerable situations, identifying, for example, the justifications, prejudices and moral disengagement they adopt when committing crimes.

#### **Conclusions and limitations**

It is important to acknowledge that nobody should feel excluded from managing transit safety for individuals with disability. The first issue to consider is the need to address the problem in terms of joint responsibility with intersectoral action. Studies on safety must keep psychological perceptions in mind, just as they must also consider the architecture of transit facilities (Ceccato 2013), dedicated regulations on this issue and transit employees' authority to monitor nuisances. The competence of a disabled woman in dealing with problematic situations, law enforcement's



capacity to fight crime as well as the responsibility the general population can shoulder in defusing situations that can lead to crime must be considered. Intersectionality also relates to the different users who use transport and especially involves all passengers with special needs or those who may be vulnerable.

The attribution of vulnerability is a complex process that is frequently discussed in the literature. Some studies tend to focus attention on vulnerabilities, interpreting them in personal terms, while others consider them in relation to the environment and social relationships. To date, the limitations of research are related to the fact that disability is an underdeveloped theme within social sciences, public health, engineering and other disciplines. When transit safety among individuals with disability is addressed, it is generally done within the limits of each individual discipline and not through an interdisciplinary perspective.

Regarding victimisation, the literature indicates the existence of a large hidden area due to difficulties in reporting and the ambivalence with which such crimes are handled. There is, however, some evidence that women with disabilities are victims of physical and sexual aggression at a rate which is double that of people without limitations.

The situation is especially worrisome as offensive actions that take place on transit, in addition to causing psychological distress, may seriously limit access to essential services: travel to work, social services, shopping, school, universities, etc.

There is also evidence relating to transit conditions and the ways that offences are committed, most notably overcrowding, unstaffed locations, waiting times, and dubious, invasive and undesirable contact.

Regarding the way in which offenders select women with disabilities as targets, we would like to draw attention to four elements that support violence: perceived vulnerability, threats, the presumption of impunity and prejudices against disabled women.

For perceived vulnerability, offenders take aim at women with disabilities because they are seen as 'vulnerable' victims. Furthermore, criminals often use threats, as they believe the victim to be quite afraid of suffering consequences for making a report. For example, some women fear losing privileges, undergoing restrictions, not being able to use transport services any longer or being moved to a facility. In many cases, those who commit such crimes know that their victims feel tied to them in some way, either emotionally or financially. Criminals know quite well that many women with disabilities may be embarrassed about making their experiences public. This places many women with disabilities in a constant state of weakness, as criminals learn that they can target them without punishment.

Many criminals have prejudices against women with disabilities, including the idea that disabled women and girls are 'asexual' and that they do not suffer since they are disabled. This encourages offenders to justify actions which go beyond acceptable limits (Iudici et al. 2015).

In reference to crime prevention, such actions cannot be delegated to transportation systems alone, but rather must be taken on multiple levels, by several stakeholders. On the legislative front, it is important that when reports are made more information is obtained on the conditions surrounding the crime, not just the broader categories. Another fundamental aspect is to redefine the 'legal



capacity' of people with disabilities, as suggested by the UN Convention. At the community level, it is necessary to create partnerships between different agencies to design surveillance systems and implement staff training, and to increase awareness among citizens. In this process, there is an opportunity to involve individuals with disabilities to a greater extent and consider them active participants in enhancing their ability to manage risks, to implement safer behaviours and to better handle any type of transit violence.

The limitations of this study are tied to a still-underdeveloped theme, one which has often been addressed by individual disciplines (psychologists, criminologists, architects) but not through an interdisciplinary approach. Our choice not to devote insights to specific professions is another source of limitation. Only by sharing strategies and getting institutions, organisations and the public at large to work together can we reduce the incidence of violence against women with disabilities on public transport.

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