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Public Transport Environments

Exploring Key Factors that Influence Perceptions of Safety in Public Transport Environments

DDoSP

Key Factors Influencing Perceptions of Safety in Public Transport Environments

Public transport environments (such as subway and metro stops, bus and train stations, other transit stops, as well as onboard multiple modes of transportation) are often perceived as 'hotspots of fear' due to the safety and security concerns of the public [1, 2]. Fear of theft, harassment, assault, or aggression are key concerns in transport spaces [3]. While individual characteristics (e.g., age, sex, and previous victimisation) influence perceptions of risk and danger [4], key features in the design and management of public transport environments can impact feelings of safety [2].

Management and Maintenance

The physical upkeep of transport spaces significantly influences perceptions of safety, as signs of disorder can trigger a downward spiral in safety perceptions [4]. Neglect (e.g., **graffiti**, **broken infrastructure**, **litter**) can create a perceived lack of safety. Initiatives such as removing or covering graffiti, replacing damaged signage, and ensuring prompt litter removal can be effective strategies for improving perceived safety [5].

Visibility and Obstacles

Effective lighting enhances feelings of safety by improving visibility. Lighting remains one of the simplest and most cost effective ways to improve perceived safety [2]. Lighting is primarily intended to illuminate areas where potential dangers may be concealed, rather than directly lighting the transport users themselves [6].

Interventions to increase a sense of 'eyes on the street' can also be effective to improve perceived safety [5]. Research highlights the importance of 'prospect', referring to **clear lines of sight**, which enhances safety by reducing uncertainty about what lies ahead or around corners [2]. Strategically placing windows and entrances, removing solid walls, using glass panels, convex mirrors, and transparent shelters are emphasised throughout the literature as design features that improve visibility and remove obstacles in transport places [4, 5].

Accessible and **clearly marked escape routes** can reduce fear of being trapped in unsafe situations, fostering a sense of security in transport spaces [2].

Surveillance

CCTV is linked to a modest reduction in crime in public spaces and can positively influence feelings of safety, though this is not a consistent effect and relies on people being made aware of enhanced surveillance [4, 7].

Behaviours of Others

Intoxicated individuals, homelessness, and **disorderly behaviour** by groups of young people can trigger feelings of insecurity in transport environments [8]. Effective management of these behaviours is critical for enhancing feelings of safety.

Whole Journey Approach

It is vital to highlight the importance of adopting a whole journey approach when understanding fear of crime and violence associated with public transport [9]. Feelings of safety extend beyond transport facilities to include **walking paths**, **underpasses**, **surrounding areas**, and nearby **high-crime zones**, where unfavourable conditions can heighten perceived insecurity [10]. Ensuring safe design and management across these factors ensures a safer experience for users throughout their journey.

Women's Safety Perceptions in Transport Spaces

Women experience a heightened sense of risk on public transport compared to men, often fearing harassment and violence. Transport customer data from 28 cities worldwide shows that women are 10% more likely than men to feel unsafe on metros (6% for buses) [11]. In England, 58% of women aged 16 to 34 feel unsafe using public transport alone after dark, the highest proportion of any age and sex group [12]. Sexual harassment on public transport is a growing issue, hindered by under-reporting and a lack of data. It reinforces fear of crime, limiting women's mobility and reducing public transport use [13].

While addressing key design and management features to improve overall feelings of safety can be effective for the general population (as described above), a growing body of literature highlights targeted initiatives aimed specifically at enhancing women's perceptions of safety in transport spaces.

Social Initiatives

Anti-harassment strategies on public transport can foster community responsibility through **active bystander programmes**, providing greater support for vulnerable riders, and reinforcing the message that harassment is unacceptable among passengers [14]. **Public awareness campaigns** can also be highly valued by women when implemented effectively [13].

Technology

There is some evidence that **digital apps** delivered by transport providers can help enhance users' sense of safety by providing information on wait times [15]. Female riders are more likely to use mobile phones to feel connected to others while waiting for transport [8, 16]. Improved **incident reporting mechanisms** that are responsive and easy-to-use may also be important for improving safety for women [13].

No single intervention guarantees feelings of safety in public transport environments. However, evidence suggests a multifaceted approach (including design improvements, effective management and maintenance of infrastructure, and targeted social and technological initiatives) can improve feelings of safety in transport spaces [4].

For a comprehensive discussion on how transport-related safety perceptions influence health behaviours, see our related document, 'Transport Safety and Health Behaviours' available at **doubledividendofsafety.org**.

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THE DOUBLE DIVIDEND OF SAFETY PROJECT

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