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Passenger acceptance of counter-terrorism security measures in stations

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Abstract: Terrorist attacks pose a serious threat to the EU, particularly in public transport hubs such as railway stations due to their level of accessibility and where the individual passenger security screening methods used in airports is impractical. Consequently, methods of increasing station resilience against terrorist attacks in Europe have been explored as part of the recent SecureStation project. To support this work, public transport passengers from across Europe were surveyed to gauge their opinion on current counter-terrorism security measures in stations and the acceptability and perceived effectiveness of potential security enhancements. The results, from a total sample of 489 respondents, provide indications of passenger priorities, their opinions of current station security, the acceptability of different security measures and the degree to which they increase feelings of safety. Together with summaries of similar studies, this paper gives an overview of passenger acceptance of various counter-terrorism security measures and point to areas for further research.

1. Introduction

Terrorist attacks on public transport (PT) represent a significant global security risk with past incidents involving explosives, toxic material dispersion and firearms, often resulting in casualties, infrastructure damage and subsequent fear of future attacks [1, 2]. Strategically, terrorists will choose targets where the defence is weak and the expected gains are high in order to achieve their objective of creating fear and anxiety among the general population [3, 4]. The airline industry has responded by augmenting the level of individual passenger screening at airports in order to reduce risks and restore passenger confidence, but often at the cost of increased waiting time and ticket price [5, 6]. However, this is impractical for most land PT networks such as railways whose stations and terminals are openly accessible, multi-functional buildings with free circulation of passengers, making them particularly vulnerable targets. Even those which do enforce a baggage screening procedure cannot prevent an attack within the building before the screening gate, as demonstrated by the IED (Improvised Explosive Device) attack at Volgograd Railway station in 2014 resulting in multiple fatalities [7].

Another way of addressing this threat is to incorporate counter-terrorism prevention, mitigation and resilience into the design of infrastructure. For example, road-layout design and crash-rated street furniture can be used to maintain a safe stand-off distance between vehicles and the building envelope in order to prevent or mitigate the effects of a VBIED (Vehicle Borne Improvised Explosive Device). Similarly, the architecture of the station can be designed to improve passenger flow in normal and emergency situations, reduce potential hiding places for IEDs and mitigate the effects of fires and explosions. Structural engineering techniques can also be implemented at the design stage to increase building resilience to blast effects [8-10]. Furthermore, features such as laminated glazing, protective coatings and blast resistant walls can significantly reduce potentially lethal fragmentation from IED detonations with minimal alteration to the building’s appearance and can also be retro-fitted to existing stations. The recently completed SecureStation project, funded by the EU under Framework 7, has produced a design handbook [11] for guiding transport operators, infrastructure managers and architects in these design strategies. The guidelines also outline security measures which are beneficial in
improving a station’s appearance, reducing personal crime and vandalism and improving the perception of safety as well as being an effective deterrent against terrorist attacks. This approach, often referred to as Crime Prevention Through Environmental Design (CPTED), can be considered a more cost effective risk mitigation strategy due to the complementary benefits. It is being increasingly acknowledged that for counter-terrorist resilient design to be successful, it must be acceptable to the users as well as being effective - an acceptability which can be dependent on a complex mix of financial, social and aesthetic considerations [12, 13]. In order to better understand this aspect of station security, passengers and other stakeholders were surveyed regarding their opinions on current security measures and the acceptability of potential security enhancements. This paper focuses on analysis of the passenger survey which sought opinion on issues such as passenger screening, sniffer dogs, security staff, station design, lighting, CCTV and communications systems in the context of safety and security.

2. Review of previous studies
Since 9/11, several qualitative and semi-quantitative studies have been conducted in Europe and the USA in order to gauge the public perception of increased security and the potential trade-off between safety and civil liberty. Some of the studies relevant to the issue of passenger acceptance of security are reviewed here. It should be noted that the nature of this research requires observations related to age, gender, race and religion because these influence passenger acceptance of certain security measures (particularly those involving profiling), as reflected in some of the findings from the following reports. One advantage of the CPTED approach is that it avoids such issues.

2.1 UK qualitative study of passenger screening methods
After the London terrorist bombings in July 2005, the Department for Transport (DfT) commissioned a series of studies on passenger attitudes to and acceptance of transport security measures including: passenger full-body scanner and luggage X-ray [14]; passenger index finger swabbing [15] and sniffer dogs [16]. The trials were carried out in underground and main line stations in England and qualitative results of passenger attitudes and perceptions were obtained through in-depth interviews and discussion groups.

The main issue associated with the full body scanner (terahertz high resolution imaging) was an objection to the operator being able to see the person’s body, particularly from younger women and Muslim women but less so from men and older women (scanners currently used in most airports do not show detailed images on the operator’s display screen). Most women felt more comfortable if a woman was operating the scanner whereas the men were not concerned about the gender of the operator. Most expressed the view that to be effective, all passengers should be subject to scanning rather than just a sample but that the method of scanning was impractical for a busy station causing journey delays and suggesting that the technology should be developed to enable scanning whilst walking [14].

Reactions to the finger swabber test (used to detect traces of explosive on the index finger) were studied in a voluntary trial in London. Participants remembered the screening as taking < 5 minutes, which they deemed acceptable except during rush hour. There was generally little prior-knowledge of this procedure and people wanted to know what the equipment detected and what the selection process was. Younger participants tended to be suspicious that their fingerprints would be stored which they considered an invasion of privacy. White respondents and older respondents were less concerned about privacy and saw it as an acceptable sacrifice for enhanced security. Other concerns included cleanliness of the finger scanner and journey delays, but generally people welcomed the concept of greater security screening [15].
Another method for detecting trace explosives is the use of dogs. The trials which took place in London involved the British Transport Police carrying out a random stop and search where the dogs sniffed closed luggage, followed by a manual search by officers. Some of those searched expressed embarrassment at being openly approached by police officers, some felt the manual search was very invasive and some from minority ethnic backgrounds believed they had been stopped due to their ethnicity and objected to this. Passengers wanted to know what the dogs were detecting, why the police were doing it and what selection criteria they used. A second trial involving dogs and handlers patrolling the station (the dog sitting beside any detected explosive trace) was received more positively as an acceptable security procedure. The information boards about the trial reassured passengers but most would have liked more information and reaction to the dogs was generally dependent on how the person felt about dogs. Most people in the study were aware of sniffer dogs and saw them as the most familiar and non-controversial security measure and some said they should be used at all stations. They also petitioned for more privacy for those who were searched, the avoidance of journey delays and a procedure for passengers to alert a dog handler to a suspicious person or package [16].

2.2 UK quantitative study on security trade-offs
A 2010 study by Potoglou et al [17] attempted to quantify an individual’s trade-off between privacy, liberty and security in the context of UK rail travel using the stated choice questionnaire methodology. This method aimed to elicit respondents’ choices from a set of realistic but hypothetical scenarios with their choice indicating the trade-offs they are prepared to make between cost, convenience and effective security. Overall, people preferred some kind of monitoring system, either normal CCTV or CCTV with facial recognition; they generally preferred less intrusive security checks (e.g. X-ray scanning of bags rather than a manual search); and they preferred to have more specialised security personnel rather than regular railway staff. As expected, respondents preferred situations where more terrorist plots were foiled, but were less likely to choose options where a security incident resulted in visible disruption – in other words, people wanted to be kept safe but would rather not be aware of any incidents at the time. As for ticket price increases, the highest average acceptable increases (£3.54 and £4.44) were associated with the successful disruption of many terrorist plots (10 and 20 plots over 10 years). The next highest valuation (£3.13) was placed on reducing the time taken to pass through security from 13 minutes to 1 minute. In summary, passengers are prepared to pay for improved security if it works and doesn’t cause excessive delay their journey.

2.3 Semi-quantitative survey of students in USA
Vicusi and Zeckhauser [18] surveyed American law students in 2002 on their perception of terrorism risk and their willingness to sacrifice civil liberties in order to reduce it. The authors make the point that terrorism risks are imprecise and difficult to predict since events are relatively infrequent, and consequently people’s assessments of them are highly subjective (in contrast to the risks of smoking or driving, both of which are well documented). According to the paper, “the main civil liberties issue is not whether searches should be undertaken, but whether a particular population group should be targeted”, echoing the findings from the UK trials reviewed earlier. The survey investigated how long people were prepared to wait (10 min, 30 min or 60 min) so that all passengers could be screened at an airport rather than just people who are ‘profiled’ (i.e. selected if their appearance and/or baggage matches a typical terrorist profile). The study was divided into ‘white’ and ‘non-white’ people and those who were selected for screening and those who were not. Generally, for respondents who were not profiled for screening, preference for profiling over universal screening increased greatly with an associated increase in waiting time. For those who were profiled, preference for profiling over universal screening was not affected much by the waiting time and remained around half each. Generally, ‘non-whites’ were less supportive of profiling than ‘whites’; a 10min or 30min waiting time to
screen everyone was preferable to profiling even when the respondent is the one having to wait (especially if said respondent is white) but when universal screening required a wait of 60 min, most respondents preferred profiling. When asked how much they were prepared to pay in increased ticked price for reduced risk of terrorist attack, the mean acceptable price increase was 25% for halving the terrorism risk and a 69% for zero risk.

3. Survey on passenger acceptance of counter-terrorism security measures in stations

Building on this existing research, a passenger survey was developed within the SecureStation project to study the opinions of passengers on station security within the EU (Appendix 1). An on-line questionnaire methodology was used in order to elicit a suitably large number of responses across Europe within a limited budget. Other benefits of this method were immediate data collection in electronic format, respondent anonymity and avoidance of interviewer bias or groupthink effect. The potentially negative aspects of using an online survey were a bias towards internet users and no opportunity for clarification or receiving more detailed answers. The survey was open to anyone over the age of 18 who uses a PT station or terminal within the EU at least once a year. The questionnaire was preceded by a brief summary of the project’s aims and objectives and was available in English, Italian, Spanish and Romanian (corresponding with the nationalities represented by the project partners). The population of interest can be defined as all users of PT stations within the EU.

3.1 Survey response and demographic representation

The on-line survey was accessible between 1st July and 14th Oct, 2013 and was publicized via the project website and newsletter, links on other websites and organizational e-mail lists accessible by the project partners. 541 online surveys were started but those in which no questions were answered beyond the first two were removed from the analysis - the remaining 489 partial or complete responses (at least one main research question answered) were included in the analysis. Percentages and significance levels were calculated using the valid responses for each question. Of the 489 responses, 86% were in English, 10% in Italian, 3% Spanish and 1% Romanian. The last question in the survey asked for the respondent’s nationality but around a quarter did not give an answer. Table 1 presents the language used and nationality stated for all cases used in the sample. The nationality stated does not necessarily reflect the country of residence and it is assumed all respondents were based within the EU and are answering within that context. There are clearly a disproportionately large number of British respondents (266), probably due to the high response from those sent out to the staff and students of the University of Sheffield, as well as 50 Italian, 19 Spanish, 22 non-EU (many of whom were studying within the EU), 44 from other EU countries and the remainder unknown (88). Some tentative comparisons could therefore only be made between British, Spanish, Italian, other EU and non-EU groups (n=401).

<table>
<thead>
<tr>
<th>Language used</th>
<th>British</th>
<th>not given</th>
<th>Italian</th>
<th>non-EU</th>
<th>Spanish</th>
<th>Irish</th>
<th>Romanian</th>
<th>German</th>
<th>Dutch</th>
<th>other EU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>266</td>
<td>88</td>
<td>3</td>
<td>22</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>7</td>
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<td>15</td>
<td>421</td>
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<tr>
<td>Spanish</td>
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<td>2*</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Italian</td>
<td>0</td>
<td>44*</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>47</td>
</tr>
<tr>
<td>Romanian</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>266</td>
<td>134</td>
<td>6</td>
<td>22</td>
<td>17</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>15</td>
<td>489</td>
</tr>
</tbody>
</table>

*nationality not given but assumed to be Spanish and Italian respectively due to language used

Regarding frequency of PT use (Q.1), around half of respondents were regular PT users travelling at least once a week, and half travelled less than once a week but more than once a
year (most travelled at least several times a year). British and Italian were less likely to use PT at least once a week than Spanish, other EU or non-EU respondents (p<0.05). The most common primary purpose of travel was ‘work’ for all nationalities except non-EU for which it was ‘study’. On average, almost half used PT to get to work, 29% for shopping or leisure, 11% related to study and 10% for other reasons (Q.2).

There was a reasonably balanced gender representation with 45% male and 40.5% female (Q.10). The survey included questions on disability and blindness due to the potential influence this may have on their acceptance of security measures (Q.12 & Q.13) but only 4 respondents classed themselves as disabled and 1 as blind which is too few to make any statistical inferences. Approximately 15% of people did not answer the questions on age, gender, disability or blindness. Of those who did supply their age group (n=415), over half were aged 25-44 (55%), 27% were 45-64, 16% were 18-24 and the remaining 2% were over 65 (Fig. 1). The sample is biased towards younger adults, probably due in part to the on-line nature of the survey and in part because of its dissemination primarily amongst colleagues and friends of project partners and university staff. It should be noted that this is not representative of the ageing European population which passed the point of maturity (where those aged over 65 outnumber those aged less than 16) around 15 years ago [19], a factor which should be considered in any future studies. There was no association between age group and travel frequency with all age groups evenly represented by those who travelled at least once a week and those who travelled less frequently.

Fig. 1. Histogram showing age of people taking part in the survey (Q.11)

3.2 Survey results

The main research questions were posed in questions 3-9 of the survey. Question 3 listed issues related to public transport and asked participants to rank them from 1 (high) to 5 (low) according to how important they considered it. The results, presented in Fig. 2, show the top ranking frequency for each factor, the average of the top 3 rankings and an average of the top 5 rankings. This resulted in a consistent order for both the top priority and top 3 priority analyses: ‘Ticket price’ was the most important factor for passengers, followed by ‘Convenience / ease of use’ then ‘Journey time’. ‘Safety / security’ came fourth but was ahead of all remaining options by a significant margin. ‘Privacy’ and ‘Station design / aesthetics’ were both regarded as relatively low priorities (and taking into account the top 5 rankings for each participant revealed that privacy was a lower priority than station design). This is a positive result for the implementation of certain enhanced security measures which could be seen as compromising these particular factors.
Question 4 asked passengers to select any of the reasons listed which contributed to them choosing to travel on public transport (Fig.3). ‘Traffic’ attracted almost 250 responses, followed by ‘Comfort and convenience’ (224) and ‘Don’t want to drive’ (207). ‘Safety’ was only selected as a reason by 47 respondents despite public transport (particularly the railways) having a significantly better safety record than private vehicles \(^1\)\[^{20}\]. It is also interesting to note the relatively low number of passengers who didn’t own a car and/or couldn’t drive, implying that many had the option of driving themselves but used public transport by choice rather than by necessity.

When asked if reports of terrorist attacks (at home or abroad) have ever affected their use of public transport (Q.5), only 10% responded in the affirmative. Although females in the sample were slightly more likely than males to be affected in this way, the association between the question and gender was not significant. There were also no significant associations between the response to this question and Age, Grouped Travel Frequency or Primary Purpose of Travel.

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\(^1\) 0.3 railway deaths per billion passenger km compared with 1.9 on the road in 2008 (Great Britain)
For questions 6 – 8, chart labels include abridged versions of the full statement for readability (full statements can be found in the Appendix). Question 6 asked “According to your experience and knowledge of security measures in stations/terminals, please rate how much you agree with the following statements: ” and gave a list of statements about the current state of security. Although the survey is introduced as being primarily about security against terrorist attack, there is a huge degree of complementarity between this and security against personal attacks such as physical assault or theft. This may have been reflected in some of the responses to some of the statements e.g. “The appearance and ambience (clean, well lit) of stations/terminals increases my feeling of security” may have particular benefits for personal safety as well as being a terrorism deterrent.

Opinion across the sample was fairly divided on the issues of station security, communication and staff numbers in stations (Fig. 4). However, Italians were slightly more likely to consider current station security and number of station security staff as insufficient. A significant proportion of the sample, regardless of nationality, agreed that there were not enough on-board security staff (p<0.005).

It was generally agreed that the appearance and ambience of a station, including good lighting, made people feel safer (this was not significantly affected by gender or nationality). Although 57% of people did not want to be under constant surveillance in a station compared with 35% who did (p<0.005), 60.5% did not think of CCTV as an invasion of privacy (p<0.005) and 55% agreed that CCTV improved security (p<0.01). Spanish, Italian and non-EU passengers were less opposed to constant surveillance than those from the UK and other EU countries (p<0.01).

The majority of respondents expressed confidence in reporting something suspicious and reporting it via an Electronic Communication System (e.g. Emergency Help Point) was generally preferable to reporting via social media such as Twitter. There was a high proportion of ‘Not sure’ responses for both options, suggesting that people didn’t know what was meant by ‘Electronic Communication System’ or how they would report via social media, but taking into
account nationality, the Spanish respondents were almost unanimously confident regarding ECS, p<0.01).

Some significant findings arose from Question 7 on the acceptability of potential future security measures or changes to existing ones. The survey allowed 1 of 5 responses (‘Acceptable’, ‘Mostly acceptable’, ‘Mostly unacceptable’, ‘Unacceptable’ or ‘Don’t know’) to several different security measures or outcomes. The results are presented in Figs. 5 and 6 in order of decreasing overall acceptability. The only measure deemed ‘Acceptable’ by the majority was the improvement of the appearance and ambience of the stations through better lighting etc. (Fig. 5). This was also the strategy which people agreed would increase their feeling of security in the following question (Fig. 7). Several options received ‘Mostly acceptable’ as the most popular response, perhaps implying that they were acceptable up to a point but that used excessively (e.g. storing unnecessary personal data, too many announcements, excessive delays) would not be acceptable. Italian and Spanish passengers were evenly split on the acceptability of airport-type screening, but the UK and other EU countries were very much opposed to it (p<0.005) giving this measure the highest number of ‘Unacceptable’ responses overall. ‘Delays of a few minutes or more’ was the next least acceptable outcome.

Restricting luggage and random stop and search both had significantly more ‘Unacceptable / mostly unacceptable’ than ‘Acceptable / mostly acceptable’ but the differences between the three choices of ‘Mostly acceptable’, ‘Mostly unacceptable’ or ‘Unacceptable’ were not statistically significant, indicating that these measures are not welcomed but may be accepted with further clarification. Italians were the only nationality who tended towards accepting both luggage restrictions and random stop and search, whereas the British were strongly opposed to them, particularly to luggage restriction (p<0.01). Although there was a general acceptance of sniffer dogs, Italians (and to a lesser degree Spanish) were also more accepting of these (p<0.05).
Question 8 of the survey asked passengers to consider their ideal station and then say how much they agreed with a list of statements about how much a certain security measure would increase their feeling of security. The most widespread agreement was given to changes related to producing a lighter, brighter environment through lighting and décor etc. followed by more visible security staff, both of which are complementary to personal safety (Fig. 7). Respondents also agreed that visible security measures, real-time transport information and visible CCTV would make them feel safer, although the positive response to up-to-date transport information may be influenced by convenience as well as security. The effect of sniffer dogs on feelings of

security was inconclusive, reflecting the mixed feelings found in the previous work discussed earlier [16]. The only measure for which there was a significant negative response was reducing the amount of station furniture to improve line-of-sight. It may be that this was interpreted as meaning less seating and removal of litter bins. It is therefore the challenge of station designers to improve line of sight and reduce clutter without unnecessarily compromising on comfort or convenience.

Over 50% of passengers selected their government as a preferred source of station security funding (Q.9), followed by the EU and then station income – any increase in fares was the least preferred option. Frequent travellers were more likely to select government funding than less frequent travellers (p=0.016), but the most significant parameter affecting this response was nationality (p<0.00001): 51% of Italians preferred security to be funded by the EU and 34% through station income whereas around 60% of British, other EU and non-EU respondents favoured Government funded security (Fig. 8).

Fig. 8. Q9 Preferred source of funding for security measures for each nationality

4. Conclusion

PT passengers were surveyed to gauge their opinion on current counter-terrorism security measures in stations and also the acceptability and perceived effectiveness of potential security enhancements. 489 responses were included in the sample, over half of which were from British nationals. The sample was also slightly skewed towards the younger age groups but with even gender representation. The most popular reason for using PT was ‘Traffic’ followed by ‘Comfort and convenience’ and ‘Don’t want to drive’. Very few said their use was ever affected by news of terrorist attacks on transport systems. As one might expect, ‘Ticket price’ was ranked as the most important issue for most passengers, followed by ‘Convenience / ease of use’ and ‘Journey time’. ‘Privacy’ was found to be the lowest priority, slightly above ‘Station design’.

The most acceptable measure was the improvement of the appearance and ambience of the station, followed by information boards and announcements. Improving the station environment was also one of the measures which made people feel more secure, along with visible security staff and visible security measures. Although the survey was primarily concerned with security against terrorist attack, there is some overlap between this and security against personal attacks such as physical assault or theft. Security measures which had particular benefits for personal safety may have therefore been regarded more highly for this reason. However, this also
highlights those measures which can be economically justified on grounds other than resilience
to terrorist attacks which may be deemed to be a relatively low risk at many stations [18].

Although improving the station environment was well-received, the negative response to
improving line-of-sight through the reduction of station furniture suggested a possible
association with the undesirable loss of seating and rubbish bins. The challenge, therefore, is to
find ways of improving line-of-sight without compromising on seating, rubbish disposal or other
station conveniences. Of course, making it more difficult to hide an IED or act in a suspicious
manner undetected is significantly more effective if passengers have the confidence and
knowledge to report such activities. The survey revealed an overall confidence in reporting
something suspicious but a lack of certainty on how to do it. Increasing staff numbers is costly,
but empowering passengers to identify and report potential terrorist activity is inexpensive and
potentially highly effective. However, it could be argued that this would create a culture of
paranoia and that further development in sensor technology and video analytics is required to
provide the necessary surveillance [21].

Individual airport-like screening was the least acceptable security measure of all the options.
Long delays and, to a lesser degree, luggage restriction were also largely unacceptable. There
were mixed feelings on sniffer dogs, audible security announcements and the storing of personal
data. It would be interesting, therefore, to investigate these in more detail to identify the limits
and contexts of acceptability of these measures.

There were some statistically significant variations between the different nationalities or groups
represented for which there were sufficient numbers of responses (i.e. British, Italian, Spanish,
al all other EU and non-EU). For example, with regard to acceptance of airport-type screening,
luggage restrictions and random stop and search, British passengers were the most opposed and
Italians the most accepting. There were also differences regarding current station security,
reporting of security concerns, acceptance of sniffer dogs and marked differences regarding the
funding of security measures. These results highlight both opportunities and limitations to
European harmonization of security related monitoring and communications systems.

However, most EU member states were not represented enough for any statistical inferences to
be made and further research with a more representative sample of passengers from a larger
number of EU countries would be of interest. Also, use of face-to-face surveys at stations may
also provide a sample which is more representative of passenger age and socio-economic group
than the on-line survey provided. Other stakeholder opinion should also be considered and
results of a transport operator survey from the same project will be disseminated in the future.
Further research on the subject could also include gathering passenger opinion at real stations
which have implemented CPTED, individual screening technologies or other intelligent
monitoring or communications technologies. It is hoped that this research could be used to guide
transport operators in their development and implementation of security and communication
system applications in stations to enhance passenger safety without adversely affecting public
transport use or profitability.

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ATM (Italy).
5. References


6. Appendices: SecureStation online Passenger Survey

1. How often do you travel by public transport (rail / metro / bus)?
   (More than once a week; Once a week; Several times a year; Once or twice a year)

2. What purpose do you primarily use public transport for? (Work; Study; Shopping / leisure; Other)

3. Please rank the top five most important things to you concerning public transport (1=high;5=low)
   - Station comfort
   - Safety / security
   - Privacy
   - Journey time
   - Station design / aesthetics
   - Convenience / ease of use
   - Ticket price
   - Other

4. What is/are your main reasons for choosing to travel by public transport? (Tick all that apply)
   - Can’t drive
   - Don’t want to drive
   - Don’t have a car
   - Parking
   - Environmental safety
   - Distance
   - Cost
   - Traffic
   - Comfort and convenience
   - Other

5. Have reports of terrorist attacks (home or abroad) ever affected your use of public transport?
6. According to your experience and knowledge of security measures in stations/terminals, please rate how much you agree with the following statements:
   (1 = Strongly agree; 2 = Agree; 3 = Disagree; 4 = Strongly disagree; 5 = Don’t know)
   a. Station/terminal security is sufficient for reducing the risk of terrorist attacks
   b. There are sufficient security personnel in stations/terminals
   c. There are sufficient other personnel in stations/terminals
   d. There are sufficient on board security personnel
   e. I would feel more secure if I was under continuous surveillance (close or remote)
   f. The appearance and ambience (e.g. clean, well maintained and with good lighting) of stations/terminals increases my feeling of security
   g. CCTV cameras compromise my privacy
   h. CCTV cameras increase my feeling of security
   i. Communication via public announcement and advertising in stations/terminals increases my feeling of security
   j. I would feel confident in reporting a suspicious looking person or package
   k. I am aware of where to go or who to report to if I observe suspicious behaviour or objects
   l. I would be willing to report security incidents using: ECS (Emergency Call System)
   m. I would be willing to report security incidents using: Social networks (e.g. Twitter)

7. How acceptable are the following in exchange for improved security?
   (1 = acceptable; 2 = mostly acceptable; 3 = mostly unacceptable; 4 = unacceptable; 5 = Don’t know):
   a. Appearance and ambience of the stations/terminals is improved (e.g. better light, less obstacles to visibility, etc.)
   b. Restrictions are placed on the items allowed in passenger luggage
   c. Regular audible security announcements are given in stations
   d. Presence of information about security issues in stations via posters, advertising, images etc.
   e. Presence of dogs for security purpose at stations
   f. More passenger information (e.g. images from CCTV, identities, etc.) is retained by police or security service provider
   g. Implementation of airport -like screening at public transport stations
   h. Passengers and baggage are randomly screened by police/security service provider (e.g. swabbing test, body/baggage screening, etc.)
   i. The time required to access to the rail/metro/bus is increased (few seconds)
   j. The time required to access to the rail/metro/bus is increased (few minutes)

8. Thinking about your ideal station, please rate how much you agree with the following statements (1 = Strongly agree; 2 = Agree; 3 = Disagree; 4 = Strongly disagree; 5 = Don’t know)
   a. Visibility of security measures would increase my feeling of security
   b. Visibility of security staff would increase my feeling of security
   c. Presence/visibility of CCTV cameras increase my feeling of security
   d. Audible communication concerning station security would increase my feeling of security
   e. Communication (i.e. posters, advertising, etc.) explaining purposes and means of security measures would increase my acceptance of them
   f. Provision of accurate real time public transport passenger information would increase my feeling of security
   g. Presence of dogs for security purposes would increase my feeling of security
   h. Reduction of station furniture (e.g. kiosks) to provide better visibility in the stations/terminals would increase my feeling of security
   i. Increasing the brightness of the station/terminal would increase my comfort and feeling of security (e.g. through lighting, décor, natural light).

9. How do you think security measures in stations should mainly be funded? Tick one:
   (European funding; Slight increase in fares; Station income; Other)

10. Gender (M/F)
11. Age (18-24; 25-44; 45-64; 65+)
12. Registered Disabled (Yes/No)
13. Registered Blind (Yes/No)
14. Nationality