The adequacy and public perception of the public toilet provision on Guernsey

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Abstract

In recent years there has been a decline in the state of public toilets and, with over 50% of the public toilets being closed, this has become a cause for public concern. Local authorities have no legal requirement to provide public toilets and because of this some towns have no public toilet provision. The aim of this study was to investigate the adequacy and provision of the public toilets on the Island of Guernsey. This investigation was undertaken through observation of the 30 public toilet blocks and a questionnaire exploring the provision of the public toilets, emailed to a representative sample of the Island population. All 18 of the toilets for those with disabilities, 26 (out of 30) of the male and 27 (out of 30) of the female public toilets were observed and the response rate to the questionnaire was 48% (n=264). Results confirmed that there are an adequate number of public toilet facilities for the Island's population in accordance with the British Standards. Fifty-five per cent of respondents were satisfied or very satisfied with the number of facilities. However concerns were expressed about the number of the public toilet that were closed during the winter months and the proposed closure of toilets in an effort to save money. The research concluded that the adequacy, provision and impression of the public toilets on Guernsey was good, but more attention needs to be given to year-round availability and the additional facilities required within them.

Key words: Public Toilets, WC, Lavatory, Antisocial behaviour, Disabled Toilets

Introduction

Since the 1850s, attitudes towards the provision of public toilets have shifted significantly. Originally, local authorities competed with each other to create beautiful, magnificent and hygienic towns and cities (Department for Communities and Local Government, 2008). State of the art public toilets were built with no expense spared, showing off the latest developments in sanitary engineering and architecture (Greed, 2005). The impetus for good toilet provision was a result of factors such as the need to control disease and pollution in the large cities of the time, and more positively, they were built as a result of civic pride, and the desire to create beautiful hygienic cities (Greed, 2005). The sanitation needs of the public have changed with a great majority having private access to toilets and washing facilities. Demands upon the local authorities' resources

have moved to other services, resulting in a shift in the importance of public toilet provision from that of the high importance it once was.

As there is no statutory requirement for the provision of public toilets it is entirely up to the good will of the authorities to provide them. The 1936 Public Health Act (Section 87) gives local authorities the power to provide public toilets, but there is no mandatory requirement to do so. Unfortunately in the modern economic climate, this good will and discretion to meet the public's needs is weighed in the balance against other local demands. Under section 87 (3c) of the Public Health Act (1936), local authorities are allowed to charge for use of all public toilets, but not urinals. This in effect has denied local authorities a revenue source, and is not consistent with the principle of gender equality (Department for Communities and Local Government, 2008). Following the recent sexual equality regulations - the Sex Discrimination Act (Amendment) Regulations (2008), this long-standing anomaly was removed creating new scope and incentives for better provision (Department for Communities and Local Government, 2008).

The provision of public toilets is important for several reasons: people need to be able to access toilets when away from home; their closure, lack of availability or generally poor standards can be a cause for concern among would-be users. The decision to close a substantial proportion of public toilets may contribute, over time, to an increase in the number of National Health Service (NHS) patients with urinary tract infections and/or incontinence (Edwards, 1998). As well as contributing to people feeling a lack of dignity and poor hygiene as they may have to resort to street fouling and the potential for the spread of infection (Central Cities Institute, 2002; Department for Communities and Local Government, 2008). If well-planned, designed, maintained, clearly signposted toilet facilities are accessible to the public, they can contribute to local economies by creating town and city centres where people want to spend more of their time, and consequently their money. Unfortunately, in Britain there is very little strategic planning for the provision of public toilets, even though they are a vital part of any urban regeneration programme (Lockwood, 2001). This is not reflected in other countries such as Japan, which fully integrate toilet provision into its town and city planning (Miyanishi, 1996).

As there are no statutory requirements for authorities to build or maintain public toilets, regulations or codes of practice for the building of public toilets are sparse. Until

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recently only BSI BS6465, Parts 1 and 2 offered guidance and recommendations. The only provision for public toilets is one sentence in BSI BS6465 Part 1 (2006), section 7.4, which states: 'the provision of sanitary appliances in public toilets should be determined according to local need', therefore leaving it open for local authority interpretation. Fortunately, this weakness has been identified and there is a draft standard BSI BS6465 Part 4 (2010) which gives recommendations on the location, numbers, sitting, design and management of public toilets. This new standard will be applicable to the provision of new facilities, and to the retention and refurbishment of existing facilities. In 2006 the Singapore Restroom Association updated and reprinted its 1999 A guide to better toilet design and maintenance, and in the United Kingdom (UK), the British Toilet Association (BTA) offers a consultancy service auditing the councils' provision based on what users have highlighted, and the BSI BS6465 recommendations. The BTA's demands for the Government to place an obligation on local authorities to provide adequate public toilet facilities have not been dealt with owing to a lack of support from within the Government. In essence, The Public Health Act (1936) gives local authorities the power to provide public toilets, but imposes no duty to do so.

It is evident that this lack of strategic toilet policy planning is also reflected on the Channel Island of Guernsey. In light of this, Guernsey was chosen as the location for this research study, because it is the home of researcher and to establish the impact the public toilets may have on the islands population and its touristic nature. Guernsey is situated roughly 30 miles from the French coast and some 70 miles from the south coast of England. The Island has an area of approximately 24 square miles, divided into 10 parishes, and services an island population of 62,274 which fluctuates in the summer months, increasing by about 3,000 (States of Guernsey, 2010). Guernsey is Crown Dependant, but independent of the UK, and is outside the European Union. Its main financial income is from the finance industry followed by tourism. Even though Guernsey is independent of the UK, it does adopt many of the UK guidelines and recommendations.

Guernsey has a total of 30 public toilet blocks as well as those situated in Government buildings. These toilets consist of coastal toilets, which are mainly situated beside kiosks (local beach cafes), and those managed by the individual parishes and harbour authorities. The provision of facilities for disabled people and for parents of young children and babies varies across the Island. The lack of adequate accessible well-lit and good quality public toilets affects a wide range of people including women, families with young children, disabled people, the elderly and anyone who has frequent need of a toilet (Greed, 2004; Department for Communities and Local Government, 2008). Poor provision can result in people feeling a lack of dignity as they may have to resort to street fouling. Vulnerable groups who feel unable to go out without the assurance of access to clean, safe and accessible toilets are at risk of social isolation. The extent of the problem on the Island of Guernsey is unclear. Therefore, this study was undertaken to address the local gaps in knowledge, establish the provision and perception of the public toilet provision on Guernsey.

Methods

Non-participant observation

Over a two-week autumn period (1st to 14th November 2010) each of the 30 public toilet blocks were individually visited and surveyed using an adapted checklist developed by Hanson et al., (2007) based on the BTA (2000). Through direct non-participant observation, where the researcher is not directly part of the situation being observed – in essence an outsider looking in (Lanoë, 2002). The male, female and disabled toilets of each of the toilet blocks were directly surveyed by the researcher using the adapted gualitative checklist. As there were only 30 public toilet blocks available for surveying, it was decided to include them all, thus aiming to provide comparative and representative data describing the public toilets on Guernsey. The results were recorded directly 'on the spot' using a portable computer (Viewpoint7 Tablet VP70 from Customer Research Technology). Prior to the consultation period, a pilot of the data collection method using three of the public toilet blocks was undertaken and subsequent changes and amendments made. At the end of the consultation period the data collected were downloaded and presented on a spreadsheet for analysis (using Microsoft Excel).

Questionnaire

A semi-structured, mixed methodology questionnaire was adapted from the Oxford City Council Your views on Public Toilets (2009) questionnaire, the Bournemouth Borough Council Seafront public toilet Satisfaction survey (2005) and Hanson et al., (2007) Attitude Survey. The questionnaire was initially pre-tested by three health professionals who completed it while being observed. As suggested by Gillham (2002) ease of use was assessed at

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this stage; queries and comments noted. Following minor amendments the questionnaire was emailed to a pilot group of 12 people. This identified the validity, reliability and any misunderstandings of the questions. Further amendments were made to the questionnaire before distribution. The questionnaire was emailed to the participants on an already developed, market research data base (*www.islandanalysis.com*). The sample was a representation of the Island's population, with an age range of 18 upwards and a 50:50 male/female split.

The inclusion criteria were those who are over the age of 18 and answered 'Yes' to the survey question 'have you used Guernsey's public toilets in the last 12 months?'. To achieve reliability and accuracy, it was decided that the questionnaire would be sent to all 431 potential respondents on the data base. A further 124 questionnaires were e-mailed to researcher's email contact list. Informed consent for participation in the study was assumed by the respondent completing and returning the questionnaire as suggested by Thomas (2000). Respondents' anonymity was maintained by allocating a unique identification number.

Two weeks following the initial mail shot of the questionnaire, a follow-up reminder was sent to those who had not responded, and a further two week period was allowed for late responses. At the end of the consultation period, the information was downloaded and presented on a spreadsheet for analysis using a descriptive statistical tool (Microsoft Excel) as suggested by Salkind (2007). The qualitative findings were analysed using a qualitative content analysis style according to the major themes identified in the data. Qualitative content analysis involves breaking down data into smaller units, coding and naming the units according to the content they represent, and grouping coded material based on shared concepts (Polit and Beck, 2008). Recurring themes that emerged from the data were as follows:

- The implications of public toilets for men and women
- Disabled toilet access
- The affects of antisocial behaviour
- Closure of public toilets and
- The issue of payment to use public toilets.

Results

Non-participant observation

On the Island there are 18 disabled toilets, 30 male and female toilets, situated in the toilet blocks. During the

consultation period, four of the male toilets and three of the female toilets were closed for the winter months. All the 18 disabled toilets were accessed. The majority of the facilities were easily accessible with good signage apart from one male toilet which had 12 slippery steps leading down to it. The disabled toilets were only accessible with a RADAR (The Royal Association for Disability Rights) key.

Generally, the toilet facilities had a 97% rate for good lighting, good contrast in internal decoration and clean facilities; only two of the male toilets did not meet the standards. Only one of the 27 female and none of the disabled toilets had a sanitary bin. Fifteen of the male toilets, 21 of the female toilets and 14 disabled toilets had accessible waste bins. Baby changing facilities were present in only four of the male toilets and 20 of the female toilets. There were no adult changing facilities in any of the toilets. Twenty of the male and 22 female toilets had automatic all-in-one hand washing facilities (hole in the wall type), but all 18 disabled toilets had a wash basin and hand towels or hand dryer. Only one of the male toilets had liquid soap and five had a bar of soap; seven of the female toilets had liquid soap dispensers and 20 had bars of soap. Of the disabled toilets, only two had liquid soap dispensers, 15 had bars of soap and one had no soap at all.

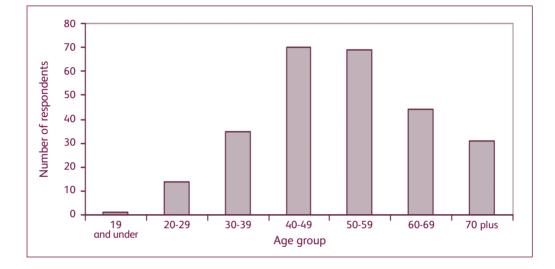
On average the female toilets had three toilet cubicles per facility, and the male toilets had one toilet cubicle and two urinals. Seven of the female facilities had four or more toilet cubicles, and 18 of the male toilets had four or more urinals/toilet cubicles per facility. In total there are 84 female toilet cubicles, 58 male toilet cubicles and 69 male urinals. All the 18 disabled facilities had a toilet but no urinal, they all had sturdy grab rails present, none of the facilities had an alarm, and 17 of them had transfer spaces free of obstruction. Twelve of the 18 disabled toilets had the flush lever on the transfer side.

Questionnaire

Of the 555 questionnaires emailed to the participants, there was a 48% response rate. Figure 1.0 displays a breakdown of the number of respondents in respect to their age group. Fifty-six per cent of the respondents were female and 44% were male; however 10% of the respondents did not meet the inclusion criteria. Therefore only 90% of the responses were eligible for inclusion in the study.

The respondents were asked to identify, with reasons, which public toilet they felt was the best facility. The

Figure 1.0 The number of respondents by age groups



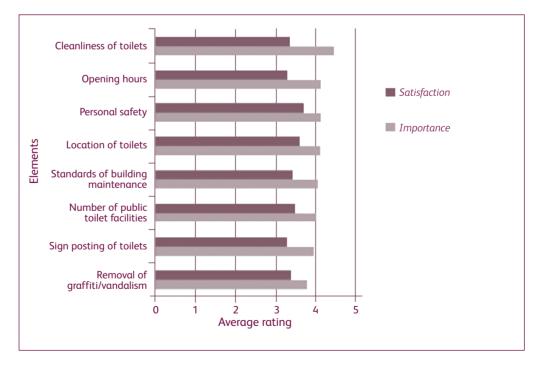


Figure 2.0 Average rating with

regards to elements of Guernsey's public toilet blocks (1=very unsatisfied/ unimportant, 5=very satisfied/important)

majority (34%) of the responses rated the bus terminus toilets mainly because of their convenient location to the main shopping area and their cleanliness.

When asked to rate the importance of the various elements of the public toilets' cleanliness (67 %) and personal safety

(45%) were rated as very important. However, when asked how satisfied they were with the same elements, 47%were satisfied and a further 8% were very satisfied with cleanliness. For personal safety 57% were satisfied and 10% were very satisfied. Other very high rating elements are opening hours and location; the removal of

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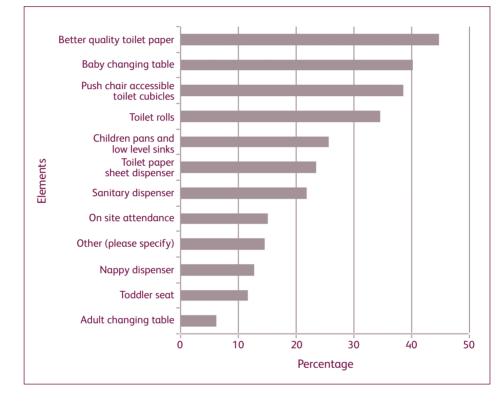


Figure 3.0 Percentage of additional facilities the respondents would like to see in the public toilets

graffiti/vandalism was rated as being the least important with 7% identifying this as being very unimportant. Figure 2.0 displays an average rating of how satisfied/very satisfied the respondents felt about specific elements of the public toilet blocks against how important/very important they felt about the same elements.

Additional facilities that the respondents would like to see in the public toilets were also identified. Forty-five percent of the respondents identified better quality toilet paper as the additional facility they would like to see most. Baby changing tables were identified by 40% of the respondents. With only 6% responses, adult changing tables drew the lowest number of additional facilities required by the respondents. Other facilities identified were: paper towels, less tightly packed paper dispensers, toilet brushes, mirrors, on site attendants, hot water, drinking water taps, door hooks and outward opening toilet doors. Figure 3.0 displays the percentage of additional facilities that respondents would like to see in the public toilets.

Only a small percentage of the respondents (4%) planned their journeys around the Island's public toilets,

and a further 19% sometimes planned their journeys around them. The main emerging themes for planning their journeys were medical conditions such as bladder and bowel disorders, diuretic medication, dependant relatives/children, and participating in outdoor leisure activities such as running and walking.

The preferred choice of toilet facility when away from home was identified. Forty-six per cent respondents identified restaurant toilets as being their preferred choice of toilet, followed by public toilets with 31% preferring to use them. Four per cent of the respondents stated that they use the closest toilet facilities when in need. Two respondents stated that when a toilet was not available they would use hedges, gateways, fields and sometimes a quiet area of the park.

At present there are no 'pay to pee' toilets. Some respondents were happy to pay to use the toilets if they were of a high standard (61%), while others felt they had already paid for them in their taxes (39%). When asked if the respondents would pay to use a public toilet, if the money went towards the annual £500,000

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required for the upkeep and cleanliness of the facilities, 61% respondents stated they would be happy to pay. Out of the 144 responses, 20p was the preferred choice of charge with 55% happy to pay this. Twenty-eight per cent were happy to pay 10p and 12% 50p. Only one person was happy to pay £1.00 to use a public toilet. The overall impression of the public toilets was good with a 48% response rate, and 12% very good. Two percent of the respondents felt the toilets were very poor and 29% gave a neutral response. Only 1% of the respondents' impression of the toilets was very poor.

The respondents were asked if they had any additional comments they would like to add in relation to Guernsey's public toilet provision. Over half (51%) of the respondents took the opportunity to make comments. Emerging themes were cleanliness (24%), closure of toilets (9%), opening times (8%), vandalism (11%), lack of public toilets in the main shopping area (18%), upgrading the current public toilets (5%), tightly packed toilet paper dispensers (7.6%), and payment to use the toilet facilities (19%).

Discussion

Recommendations made by the BSI (2010) and BTA (2000) on the number and type (male and female) of public toilet facilities per head of population show that the Island is more than adequately covered. Even with this information, only half of those surveyed were satisfied with the public toilet provision on the Island.

As found in many countries (Gerhenson and Penner, 2009) there are fewer female facilities compared to male facilities on the Island. There is a greater need for female facilities as they are more often out during the daytime, use public transport and are accompanied by children, the elderly and the disabled (Cavanagh and Ware, 1991; Booth *et al.*, 1996). Historically, British public toilets were built in an age when more men were often out of the house compared to women. The BSI BS6465 Part 1 (2006) Code of Practice for the design of sanitary facilities has been updated to correct this historical inequality.

The BSI (2010) recommendations stated that:

• Local authorities should ensure public toilets can be easily found by users, and that they are situated on frequently used routes; the direct non-participant observation found that the three main town centre public toilets complied with this. Also the town centre public toilets were open 24 hours a day.

- Coastal and cliff-path public toilets are situated between 1.5-5 miles apart and the majority of the facilities are well signposted, have good access, good lighting and internal decoration. The Guernsey facilities complied with this.
- Adequate baby changing facilities should be provided in all public toilets, accessible for both able bodied and disabled men/women. Observation revealed that the Guernsey public toilets do not meet these recommendations as only one of the public toilets situated in the town had baby changing facilities which would be accessible to all, and only 74% of the female toilets, and 16% of the male toilets, had baby changing facilities. Forty per cent of the respondents identified baby changing facilities as one of the main additional facilities that they would like to see in all of the public toilets.
- The Environmental Protection Act (1990) recommends there should be a sanitary disposal bin in every women's and disabled toilet cubicle. Results revealed that a sanitary disposal bin was present in only one of the female toilets, and none of the disabled toilets and baby changing areas, therefore not complying with the Environmental Protection Act (1990).
- Hand washing should be able to be performed with minimal contact with fittings, using lever taps or automatic all-in-one hand washing facilities. The majority of the male and female public toilets offered the desired automatic all-in-one facility. For those that did not, they offered either paper towels, or electric hand dryers, accompanied by either liquid soap or a bar of soap. Worryingly, a bar was the majority type of soap, especially as scientific evidence suggests that a bar of soap following use has a high bacterial count (McBride, 1984; Kabara and Brady, 1984); however, studies have failed to show the transfer of these microorganisms to the hands on subsequent use (Heinze, 1985; Heinze and Yackovich, 1988).

Since 1979, purpose-designed unisex public toilets have been available under the RADAR (The Royal Association for Disability Rights) key scheme, in which specifically adapted toilets for people with disabilities are locked, and can only be used by those who have access to the appropriate key (Blackman *et al.*, 2003; Brawley, 1997). An advantage of these purpose-built disabled toilets are that they are unisex, which is helpful for the user, because they may be accompanied by a carer (often a spouse or relative), of the opposite sex.

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Out of the 30 toilet blocks visited, only 18 of them had a disabled toilet which was accessible with a RADAR key and out of the 237 responses to the Guernsey questionnaire only one (0.4%) had a RADAR key. Under the terms of the 1995 Disability Discrimination Act (DDA), disabled toilet provision should be equal to that for the 'abled' bodied toilets (Office of the Deputy Prime Minister, 2004). Unfortunately in Guernsey there is no Disability Discrimination Act and the States are not legally obliged to adhere to the UK quidelines and recommendations.

The direct non-participant observation of the toilet facilities was undertaken during the first two weeks of November 2010, which is the lowest month of the tourist season. It may not have portrayed a true representation of the toilets, as they may have experienced 'low use' whereas in the summer months their usage increases to that of 'heavy use' (BSI, 2010). Also 10% of the female toilets and 13% of the male toilets located in the areas of 'low use' were closed for maintenance and to save money. (These toilets were reopened at the end of February).

The response rate to the questionnaire survey (of 48%) was satisfactory, considering the type and topic of the survey. The majority of respondents were in the 40-49 age group. Female responders were in the majority; women have a vested interest in this subject, as they have been identified as the group most regularly out and about in the daytime, they travel on public transport more than men, and often are accompanied by children or elderly or disabled relatives (Cavanagh and Ware, 1991 and Booth *et al.*, 1996).

The survey findings reflect the results of similar questions asked as part of the Bournemouth Borough Council Seafront Survey (2005). The respondents noted the following:

- The public toilets based at the bus terminus as the most frequently used, citing their convenient location, cleanliness and their 24-hour availability
- Highest satisfaction with the location of the public toilets, followed by their personal safety and number
- Least satisfied with sign posting and toilet opening times
- Concerns about the type and quality of the toilet paper. Tightly packed toilet paper dispensers caused a mess as the paper ripped on removal and fell on the floor

- The main choice of public toilet facility when away from home was identified as a restaurant toilet followed by a public toilet facility.
- Thirty-nine per cent of the respondents were not • willing to pay to use the public toilets. An explanation for this was that they felt they had already paid for them through their taxes. Over half of the respondents were happy to pay to use the toilet facilities, with 55% of the respondents, indicating 20p as being the preferred amount. This explanation is similar to that of Edwards (1998), who argued that payment at source through the rates and taxation, rather than point of delivery at the toilet door, is more equitable (in the same way one does not pay to walk on the pavement or to sit on a park bench). Some authorities feel that charging the individual end users at the point of delivery brings in very little revenue and is ineffective. Charging for toilets can cost more than not charging as local authorities have to pay for the installation, maintenance, cleaning and security of toilet facilities.
- The main concerns expressed included closure, vandalism, cleanliness, and lack of a public toilet in the centre of the main shopping town. While these concerns were expressed in the comments' section of the questionnaire, they reflect the findings of the Bournemouth Borough Council (2005), Oxford City Council (2009) surveys and a UK study undertaken by Greed and Daniels (2002). As there is no legal requirement stating that local authorities 'must' provide public toilets only that they 'may' if they choose, the result is public toilets are becoming an easy target for cutbacks in public expenditure (Greed and Daniels, 2002). Research argues that adequate provision of public toilets, is vital to the local economy (Greed and Daniels, 2002); therefore these closures may have a deleterious effect on the health, dignity and lifestyle of millions of people, directly or indirectly. It is now the 21st century and we all deserve readily accessible, clean, well-maintained public toilets as one of our basic human rights (Greed, 2005). However, the overall impression of the Guernsey public toilets was good/very good.

Conclusions

- There are an adequate number of public toilet facilities for the Island's population, in accordance with the BSI (BS6465) recommendations.
- Concerns were expressed regarding availability in

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terms of: the reduction of the number of public toilets; times when the winter openings are implemented; and closure of toilets, in an effort to save money. The need for additional public toilets in the centre of the town was highlighted.

- The respondents want to see more in the provision of baby-changing tables, better quality paper, pushchair accessible toilet cubicles and sanitary provision. Access was also seen as a difficulty in some observations.
- There is a lack of disabled toilets and all the disabled toilets were only accessible with a RADAR key, thus excluding some users, as there is no guarantee that everybody who needs a 'disabled' toilet will have a key.

It may be concluded that overall, the adequacy, provision and impression of the public toilets is good, but more attention needs to be given to the additional facilities provided in them.

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References

Blackman T, Mitchell L, Burton E, Jenks M, Parsons M, Raman S and Williams K (2003). 'The accessibility of public spaces for people with dementia: a new priority for the 'open city', *Disability & Society*, 18 (3),pp.357-371.

Booth C, Darke J and Yeandle S (1996) Changing Places: Women's Lives in the City, London: Paul Chapman.

Bournemouth Borough Council (2005). Bournemouth Seafront Public Toilet Satisfaction Survey. Bournemouth: Bournemouth Borough Council. Available from: http://www.bournemouth.gov.uk/textonly/Visitors/Seafr ont/Seafront_Toilets.asp (Accessed 5th August 2010).

Brawley EC (1997). Designing for Alzheimer's Disease. Strategies for creating better care environments, New York: Wiley. **British Toilet Association** (2000). Public toilets in England and Wales: Statistics from Audit Commission. Winchester: British Toilet Association.

British Standards Institution (2006). BS6465 Part 1; Code of practice for the design of sanitary facilities and scales of provision of sanitary and associated appliances, London: British Standards Institution.

British Standards Institution (2006). BS6465 Part 2; Code of practice for space requirements for sanitary appliances. London: British Standards Institution.

British Standards Institution (2010). BS6465 Part 4 DRAFT; Code of practice for the provision of public toilets, London: British Standards Institution.

Cavanagh S and Ware V (1991). At Women's Convenience: A handbook on the design of Women's Public Toilets, London: Women's Design Service.

Central Cities Institute (2002). Licensing Reform London, University of Westminster, Central Cities Institute.

Department for Communities and Local Government (2008). Communities and Local Government. The provision of public toilets, Twelfth report of session 2007-2008. Report, together with formal minutes, oral and written evidence. House of Commons, London: The Stationery Office Ltd.

Disability Discrimination Act (1995). Disability Discrimination Act 1995, London: Her Majesty's Stationery Office.

Edwards J (1998). Policy making as organised irresponsibility: the case of public conveniences, *Policy and Politics*, 26 (3), pp.307-320

Environmental Protection Act (1990). Part II Waste on Land, London, HMSO

Gillham B (2002). Real World Research Developing a questionnaire, London: Continuum.

Greed C and Daniels I (2002). User and provider perspectives on public toilet provision. Report of Nuffield Trust Research, Occasional Paper, Faculty of the Built Environment. Bristol: University of the West of England.

Greed C (2004). Public Toilets: The need to provide

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compulsory provision. *Municipal Engineer Proceedings of* the Institute of Civil Engineers, 157(Issue ME), pp.77-85.

Greed C (2005). Taking Stock: An overview of toilet provision and standards, Bristol: University of the West of England, Available from: *http://kb.keepbritaintidy.org/toilets/publications/stock.pdf* (Accessed 27th July 2010).

Greshenson O and Penner B (2009). Ladies and Gents Public Toilets and Gender, Philadelphia: Temple University Press.

Hanson J, Begg N and Greed C (2007). The Accessible Public Toilet Resource Manual, London: University College London.

Heinze J E (1985). Bar soap and liquid soap. *Journal of the American Medical Association*, 253 (11), p.1561.

Heinze J E and Yackovich F (1988). Washing with contaminated bar soap is unlikely to transfer bacteria. *Epidemiology & Infection*, 101 (2), pp.135-42.

Kabara J J and Brady M B (1984). Contamination of bar soaps under "in use" condition. *Journal of Environmental Pathology, Toxicology and Oncology*, 5 (4), pp.1-14.

Lanoë N (2002). Ogier's reading research: How to make research more approachable (3rd edition), London: Baillière Tindall.

Lockwood J (2001). The lockwood Survey: capturing, catering and caring for consumers, Huddersfield: Urban Management Initiatives.

Miyanishi Y (1996). Comfortable public toilets: design and maintenance manual, Toyama: City Planning Department.

Office of the Deputy Prime Minister (2004). Access and facilities for disabled people: Approved Document M, London: Office of the Deputy Prime Minister.

Oxford City Council (2009). Your Views on Public Toilets in Oxford. Oxford: Oxford City Council Consultations, Available from: *http://consultation.oxford.gov.uk/ consult.ti/publictoilets/consultationHome* (Accessed 5th August 2010) (Internet).

Polit D and Beck CT (2008). Nursing Research: Generating and Assessing Evidence for Nursing Practice (8th edition), London: Lippincott. Public Health Act (1936). (1 Edw. VII, C.87), London: HMSO.

Restroom Association (Singapore) (2006). A guide to better public toilet design and maintenance, Singapore: Restroom Association, Available from: *www.toilet.org.sg* (Accessed 28th July 2010).

Salkind N J (2007). Statistics for people who (think they) hate statistics (2nd edition), London: Sage.

Sex Discrimination Act (2008). The Sex Discrimination Act 1975, Amendment Regulations 2008, London: Her Majesty's Stationery Office.

States of Guernsey (2010). Guernsey Facts and Figures 2010, St Peter Port: Policy Council.

Thomas S A (2000). How to write health sciences papers, dissertations and theses, London: Churchill Livingstone.