ABSTRACT

Locking the door of adult acute psychiatric wards has become increasingly common in the UK. There has been little investigation of its efficacy or acceptability in comparison to other containment methods. We surveyed the beliefs and attitudes of patients, staff and visitors to the practice of door locking in acute psychiatry. Wards that previously participated in a previous study were contacted and sent a questionnaire. 1227 responses were obtained, with the highest number coming from staff, and the smallest from visitors. Analysis identified five factors (adverse effects, staff benefits, patient safety benefits, patient comforts and cold milieu). Patients were more negative about door locking than the staff, and more likely to express such negative judgments if they were residing in a locked ward. For staff, being on a locked ward was associated with more positive judgments about the practice. There were significant age, gender and ethnicity effects for staff only. Each group saw the issue of locked doors from their own perspective. Patients registered more anger, irritation and depression as a consequence of locked doors than staff or visitors thought they experienced. These differences were accentuated by the actual experience of the ward being locked.

## BACKGROUND

Acute adult psychiatric inpatient care involves a number of different coercive practices, generally justified by the need to keep patients and others safe. They include the detention of some patients in hospital against their will, also in some cases the enforcement of medical treatment, seclusion, manual restraint and other similar practices we refer to as containment. These containment methods differ in their severity and acceptability to patients and the staff that use them. The Attitude to Containment Measures Questionnaire (ACMQ) has been widely used to obtain ratings of these methods by nursing students (Bowers et al., 2004), non-nursing students (Muir-Cochrane et al., 2008), acute ward staff and patients (Whittington et al., 2009). Results show that despite some significant differences between these groups, seclusion, manual restraint and coerced IM medication are usually perceived as more severe and less acceptable than intermittent or constant observation, or pro re nata medication (extra medication given at the discretion of the nurse).

The past 20 years in the UK has seen the introduction (or reintroduction) to acute psychiatry of door locking. In the 1960s and 70s all such wards were always open, with patients being kept safe and on the ward through observation and engagement. This picture has now almost completely changed. An early survey of London wards showed that 25% were kept permanently locked (Bowers et al., 2002). By 2005 this figure had risen to 30% for England as a whole (Bowers et al., 2007), and at the time of the study reported in this paper was 42%. The literature on door locking has been reviewed elsewhere, finding only 11 papers with empirical evidence to offer (Van Der Merwe et al., 2009). Since that review our research group has published papers

showing associations between door locking and violence (Bowers et al., 2009), self-harm (Bowers et al., 2008b) and medication refusal (Baker et al., 2008), however the methodology of the study these papers reported was cross sectional, leaving open the question of cause: locked doors leading to more disturbed behaviour, or disturbed behaviour leading to the doors being kept locked. Apart from the pioneering work of Haglund in Sweden (Haglund et al., 2006; Haglund et al., 2007; Haglund & Von Essen, 2005) and Ashmore in the UK (Ashmore, 2008), little is known about the perceptions of staff and patients with regard to this enormous change to the practice of adult acute psychiatry.

In this paper we reported the results of a large scale survey of staff, patients and visitors on the topic of locked doors, and describe comparisons between the beliefs and attitudes of those on locked and open wards, as well as comparing the acceptability of this form of containment to others previously rated.

## AIM

To assess the acceptability of door locking to staff, patients and visitors:

- To compare the views of staff, patients and visitors with each other
- To compare staff and patient views with their views on other containment measures
- To assess the relationship between ratings of acceptability of door locking and: the practice of door locking; for patients age, gender, ethnicity, and

whether legally detained or not; and for nursing staff: qualifications and experience

# METHODS

## Design

Postal questionnaire survey of staff, patients and visitors.

## Instrument

A postal questionnaire was constructed drawing on the previous work of Haglund (Haglund et al., 2006; Haglund & Von Essen, 2005). The first part of the questionnaire asked how frequently the ward door was locked to patients leaving during the day and during the night. The second included 34 Likert scaled items regarding acceptability of locking the door of an acute psychiatric inpatients ward, with 18 items regarding the effects of locking the door on patients, 7 items on the effects of locking the door on staff, 3 items regarding the effects of locking the door on people coming into the ward and 6 items parallel to the Attitude to Containment Measures Questionnaire (ACMQ) (Whittington et al., 2009). A few demographic questions followed (gender, age and ethnicity) with a question asking participants to indicate if they were a member of staff, a patient or a visitor. Additionally, there were separate sections for patients, visitor and staff. Patients were asked how many times they have been admitted to a psychiatric hospital, if they were presently detained under the Mental Health Act and if they had any previous detentions under the Mental

Health Act. Visitors were asked how many times they had visited someone (not just the person they were visiting at the moment) on a psychiatric ward. The staff section asked staff to indicate their discipline and their years of experience.

**Sample**

The sample consisted of staff patients and visitors on acute psychiatric wards which had previously participated in the City-128 study (Bowers et al., 2007). This sample was utilised due to existing contacts with the wards concerned, so that ethical approval could be obtained through variation to one already existing, and so that other arms of the study could exploit linkage with previously collected data. The sample for the City-128 study comprised 136 acute mental health wards with their patients and staff in 67 hospitals in 26 NHS Trusts (organisational units with common clinical policies and investment levels) geographically situated proximate to three centres (London, Central England, Northern England). Acute mental health wards were defined as those that primarily serve adults with acute mental health problems, mainly taking admissions directly from the community, and not offering long-term care or accommodation.

**Procedure**

Packages of questionnaires were sent to all wards that participated in the City-128 study, during November 2007 (128 wards of the original 136 ward sample could be contacted, were still open and research governance approval could be obtained), with the request that they be distributed to all available and consenting staff, patients who

were deemed fit to be able to complete them and visitors. Completed questionnaires were collected together by staff on the participating ward and returned anonymously in a single package. Ward Managers were subsequently contacted by phone and letter to confirm receipt of blank questionnaires, and to encourage participation. Ethical approval was obtained by a variation of the original City-128 study approval (Ref. MREC 03/8/085).

**Data analysis**

All the questionnaires were entered onto a computer using Snap survey optical mark recognition software. Results were then checked, with an individual inspection of each item to which there was either 'no reply', or a double response (two different marks for the same item). Data were transferred to an SPSS file for analysis and underwent a further screening to check and correct errors. Following initial exploration of the data and missing value analysis, response rates and the demography of subjects were summarised using descriptive statistics. The responses of patients, staff and visitors were compared using descriptive statistics and analysis of variance, and the different distributions in responses from the three groups compared. Ratings parallel to previously collected ACMQ data were described and compared to previous datasets. The underlying structure of responses was explored using Principal Components Analysis. Factor scores were then contrasted across different door locking conditions, and compared to subjects other characteristics utilising either Spearman correlations or analysis of variance.

RESULTS

## Response rates and sample characteristics

Responses were obtained from 61 wards and a total of 1227 questionnaires received by the end of April 2008: 638 questionnaires completed by staff, 393 by patients and 168 by visitors. For wards making a response, the mean number of questionnaires returned was 9.66 (sd = 12.21). From conversations with the different ward managers it became clear that visitors were the most difficult group to recruit, as there were very few visitors. The majority of the participating wards were locked (to patients leaving) most of the time with 42.5% locked all of the time during the day and 61.0% locked all of the time at night.

A full missing values analysis was conducted, and between 5 and 12% of responses per item were found to be missing. No pattern of missing responses was apparent, except that some respondents ceased completing the questionnaire at varying points in the middle. As no evidence of systematic bias was evident, no cases were excluded from the analysis.

Demographic details on the respondents are shown in Table 1. The gender balance for patients and visitors was roughly equal, but for staff there were more women than men. The modal age group for staff was 25-34 years, but was slightly older for patients and visitors. The majority of staff participants were qualified nurses (50%) and 43% had one to five years of experience in psychiatry (including training). Of the patient participants, 50% were informal (voluntary) and 45% were detained under the

Mental Health Act (involuntary). The majority of patients (53%) had been previously detained and admitted more than once. The majority (63%) of visitors had visited a relative or friend staying in a psychiatric ward six or more times.

**Principal components analysis**

The 34 items regarding the impact of the locked door were subjected to principal component analysis (PCA) using SPSS. The Kaiser-Meyer-Olkin value was 0.912, exceeding the recommended value of 0.6 and Bartlett's Test of Sphericity was statistically significant, therefore the data was suitable for factor analysis. PCA with varimax rotation revealed the presence of five factors with eigenvalues exceeding 1 (see Table 2). Factor scores were calculated based on all items loading greater than 0.3.

Factor 1 Adverse effects: increased adverse feelings for patients, such as depression, frustration, irritation, constraint and low self-esteem.
Factor 2 Staff benefits: diminished staff anxiety and a greater sense of confidence and control.
Factor 3 Patient safety benefits: increased safety through reductions in access to drugs/alcohol, absconding, self-harm and aggression towards the general public.
Factor 4 Patient comforts: makes patients feel safe and secure, calm and relaxed, without responsibility and aids recovery.

Factor 5 Cold milieu: hindered recovery, patients made to feel worthless and rejected, coupled with hardening of staff feelings and greater authoritarianism, with visitors made to feel unwelcome.

Comparison of the factor scores by participant type, using analysis of variance and post hoc Tukey tests showed that patients saw more adverse effects of door locking ($F[2,694] = 20.23$, $p < 0.001$ ) than staff and visitors. All three groups differed on their perception of staff benefits, with patients perceiving the least and staff the most ($F[2,694] = 24.53$, $p < 0.001$ ). Whilst there were no differences between the three groups on how they saw patient safety benefits, visitors thought locking the door created more patient comforts than the patients did themselves, or the staff ($F[2,694] = 7.36$, $p = 0.001$). Finally, staff were significantly less likely to see the locked door creating a cold milieu, as compared to patients or visitors ($F[2,694] = 54.77$, $p < 0.001$).

For patients and visitors, there was a significant positive correlation between being on a locked ward during the day and the perception of adverse effects (Table 3). No other factors were significantly associated with being in a locked ward during the day or during the night for these groups. For staff, there was a significant positive correlation between being on a locked ward during the day and the perception of patient safety benefits and patient comforts. There was also a positive correlation between being on ward that was locked during the night and the perception of patient comforts. There was a negative correlation between being on a ward that is locked during the night and the perception of staff benefits. No other factors were significantly associated with being in a locked ward during the day or during the night.

There were a number of relationships between legal detention and views on locked doors. Patients who were currently detained under mental health legislation saw more adverse effects ($r = 0.17$, $p = 0.001$) and more cold milieu ($r = 0.17$, $p = 0.001$). They also saw fewer patient safety benefits ($r = -0.13$, $p = 0.013$) and fewer patient comforts ($r = -0.11$, $p = 0.045$).

The Mann-Whitney U test indicated that there was a significant gender difference for staff ($z = -1.97$, $p = .049$). Male members of staff perceived more staff benefits than female members of staff. No statistically significant associations with gender were observed for patients and visitors.

Older staff saw fewer adverse effects ($r = -0.08$, $p = 0.041$) and less cold milieu elements ($r = -0.08$, $p = 0.047$), but also perceived fewer staff benefits ($r = -0.1$, $p = 0.012$). There were no other statistically significant relationships between effects of door locking and age of any type of respondent.

A one-way between group analysis of variance was conducted, with post hoc Tukey tests, to explore associations between ethnicity and perception of door locking. There were no statistically significant relationships for ethnicity of patients or visitors. However there were differences for staff associated with ethnicity for four of the five factors. African staff saw fewer adverse effects than Irish members of staff ($F[5,610] = 2.28$, $p = 0.045$). African staff saw more patient safety benefits than White members of staff ($F[5,611] = 2.64$, $p = 0.023$). African staff saw more patient comforts than White members of staff ($F[5, 610] = 2.24$, $p = 0.049$). Irish members of staff saw

more cold milieu elements than African members of staff ($F[5,607] = 2.66$, $p = 0.022$). The overall pattern of these results is that staff of African ethnic origin have a more positive view of locking the door, whereas staff of White and Irish origin have a more negative view.

**Comparison to other containment methods**

The inclusion of ACMQ parallel questions meant that patient and staff scores could be compared to previous large samples of staff and patient ratings of eleven other containment methods using simple ranking of mean scores. Patients considered the door being locked to be equivalent in acceptability to being sent to a psychiatric intensive care unit, less acceptable than pro re nata medication, time out, constant observation and intermittent observation; and more acceptable than seclusion, manual restraint and coerced medication. In comparison to previous survey data, staff considered locking the door to have the same level of acceptability as seclusion, less acceptable than intermittent observation, pro re nata medication, time out, constant observation, psychiatric intensive care, coerced IM medication and manual restraint; and more acceptable than being placed with staff in an extra care area (open area seclusion).

## DISCUSSION

For those wards that responded to the survey, the response rate was fair, with about half of the staff, a third of the patients and an unknown proportion of visitors on these

wards completing questionnaires. However 52% of the wards which were sent questionnaires failed to return any, thus the overall response rate could be considered significantly lower. As with any survey, the degree of response bias is unknown. Some elements of the data do support its representativeness. For example, the demographic data on staff and patients matches very closely that in the larger City-128 dataset (Bowers et al., 2008c), and the rate of daytime door locking is slightly higher (up from 30% in 2005 during the original study to 42% in 2008 during this survey), commensurate with known trends.

**Patients**

This group clearly had the most objections to the door being locked. They considered that having the door locked had greater adverse effects on themselves, including depression, frustration, irritation, constraint and low self-esteem. They were also least likely to perceive any benefits for staff, least likely to agree that it made them feel more comfortable, and most likely to consider that it made the staff cold and controlling. Such feelings were accentuated for patients who were legally detained. Together these findings highlight the intense negative feelings that patient overall harbour towards the practice of door locking. These survey reports match interview data (Bowers et al., 2008a) and outcomes of increased violence (Bowers et al., 2009), self-harm (Bowers et al., 2008b), and medication refusal (Baker et al., 2008) when the door is locked. Interestingly, however, all three groups were similar in their level of agreement about the patient safety benefits of locking the door, and its capacity to reduce access to drugs/alcohol, absconding, self-harm and aggression towards the general public.

The sample for this survey was of inpatients, half of whom were currently detained against their will. It is possible that after discharge and during outpatient care, attitudes towards the locked door and evaluations of its role might alter. Several studies have shown changes over time in patient attitudes to coerced detention in hospital, with more positive views as patients recover from their acute illness (Katsakou & Priebe, 2006). However this does not alter the potential linkage between locking the door and adverse patient behaviours fuelled by anger and depression, as these feelings still represent those generated during the admission, not eventual later evaluations.

**Visitors**

Visitor opinions sat somewhere in between those of patients and staff. Their views on the adverse effects of locking the door were indistinguishable from those of staff, however with regard to the cold milieu, their views were similar to those of patients. Their perception of staff benefits was midway between the two other groups, however they had a significantly more positive opinion on the capacity of the locked door to make patients relaxed and comfortable.

**Staff**

Staff were the most positive about locked doors, seeing greater staff benefits and less adverse effects or cold milieu effects. The fact that staff are, relatively speaking, more positive about the locked door, may go some way towards explaining the creeping

trend of increased door locking on English acute psychiatric wards. This may in turn reflect the hegemony around risk and safety which is widely commented on and commands significant political attention and influence within healthcare policy (Godin, 2006). This is reflected, for example, in vigorous measures to reduce suicide (Department of Health, 2002) and prevent untoward incidents amongst the wider public (Morall, 2002). This trend towards protective or some would argue 'defensive psychiatry' (Mullen et al., 2008; Simpson et al., 2003) may in turn lead practitioners to diminish any uncomfortable tensions around heightened security to further 'justify' their role in restricting freedoms and reduce their own anxieties (Festinger, 1957; Menzies, 1960).

**All three groups**

All three groups held opinions overall that reflected their roles. Patients, potentially resentful about restriction on their personal liberty, tended to judge the locked door more negatively. Visitors, potentially having been involved in the admission of patients as applicants under the MHA, or in persuading them to come into hospital voluntarily, may well have felt more comfortable themselves if they believed the locked door made patients more comfortable. Staff had to police the door, as well as look after patients. They were the least willing to countenance the idea that locking the door made them colder, harsher and more authoritarian, and more likely to see the benefits to themselves.

Actual experience of having the door locked seemed to polarise opinions, with patients seeing more adverse effects, and staff seeing greater safety benefits as well as

supposing that patients were feeling more comfortable. This divergence could potentially fuel tensions between staff and patients over restrictions about leaving the ward.

There were no age, gender or ethnicity difference for patients or visitors. Ethnic minority patients were no more angry, resentful or negative about the door being locked than were white British patients. However there were multiple differences for staff. Male staff saw more staff benefits, perhaps indicating that they were more anxious than female nurses with a less secure sense of control over the ward. Older staff generally had milder judgments. There were also several differences by ethnicity, showing that African staff were more favourable towards the door being locked than were white or Irish staff. This finding parallels other UK based work on attitudes to containment, which found that in a sample of student nurses, white Europeans were less likely to consider containment safe for patients and were less prepared to use it (Bowers et al., 2004). These differences in attitudes seem likely to be culturally based, and perhaps require further exploration to increase understanding.

The comparison of patient ratings on the ACMQ parallel questions to scale norms, seemed eminently sensible. Locking the door was seen as equivalent to psychiatric intensive care unit care (where the door is also locked) and more acceptable than the harshest containment methods psychiatry has to offer: manual restraint, seclusion and coerced medication. However it is worth noting that locking the door was seen as less acceptable than constant observation, bearing in mind locking affects all the patients on the ward. Thus in terms of total containment on a 20 patient ward, locking the door is worse than those 20 patients all being on constant observation for the shift. The

deduction that patients would prefer to be occasionally on constant special observation, or for at risk patients to be so, is inescapable.

The staff ratings were less logical, with the locked door seen as equivalent to seclusion (where to door is also locked, but the patient is isolated) and less acceptable than psychiatric intensive care. Unfortunately staff reasoning processes were not tapped as part of this research, therefore these rankings cannot be readily explained. Perhaps locking the door, alongside other containment methods, are issues of deep ambivalence for nurses (Olofsson et al., 1998) resulting in rather idiosyncratic responses to questionnaires on the topic.

## CONCLUSIONS

Each group saw the issue of locked doors from their own perspective, and opinions tended to follow the interests of the group concerned. However patients registered more anger, irritation and depression as a consequence of locked doors than staff or visitors thought they experienced. These differences were accentuated by the actual experience of the ward being locked, widening the gap in perspective between staff and patients. Staff should not therefore underrate how significant an issue this is for patients, especially given the links between this survey, interviews, and actual negative behavioural outcomes on wards.

Although there has been considerable concern about excess use of force in psychiatric services towards ethnic minority patients(Blofeld et al., 2003; Department of Health, 2005), there were no ethnicity differences in opinions about locked doors. Ethnic

differences between staff groups were present. While these could be brought to the surface and discussed during nurses training, this does not mean differences will be eradicated. However, it may well be important to be aware of these biases, as staff and as members of any ethnic group, so that they can be allowed for these when trying to best meet the needs of patients.

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Table 1.Demography details of the respondents

| | Staff | | Patients | | Visitors | |
|---|---|---|---|---|---|---|
| | **Frequency** | **Percent** | **Frequency** | **Percent** | **Frequency** | **Percent** |
| **Gender** | | | | | | |
| Male | 228 | 35.70 | 178 | 45.40 | 77 | 45.60 |
| Female | 397 | 62.20 | 203 | 51.80 | 85 | 50.30 |
| Missing | 13 | 2.00 | 381 | 97.20 | 7 | 4.10 |
| Total | 638 | 100.00 | 392 | 100.00 | 169 | 100.00 |
| **Age** | | | | | | |
| Under 25 | 74 | 11.60 | 41 | 10.50 | 23 | 13.60 |
| 25 to 34 | 190 | 29.80 | 85 | 21.70 | 27 | 16.00 |
| 35 to 44 | 176 | 27.60 | 99 | 25.30 | 39 | 23.10 |
| 45 to 54 | 123 | 19.30 | 78 | 19.90 | 36 | 21.30 |
| 55 to 64 | 56 | 8.80 | 61 | 15.60 | 24 | 14.20 |
| 65 or older | 4 | 0.60 | 11 | 2.80 | 14 | 8.30 |
| Missing | 15 | 2.40 | 17 | 4.30 | 6 | 3.60 |
| Total | 638 | 100.00 | 392 | 100.00 | 169 | 100.00 |
| **Ethnicity** | | | | | | |
| White | 410 | 64.30 | 279 | 71.20 | 93 | 55.00 |
| Irish | 16 | 2.50 | 13 | 3.30 | 11 | 6.50 |
| African | 94 | 14.70 | 25 | 6.40 | 11 | 6.50 |
| Caribbean | 25 | 3.90 | 23 | 5.90 | 17 | 10.10 |
| Asian | 32 | 5.00 | 11 | 2.80 | 10 | 5.90 |
| Other | 40 | 6.30 | 26 | 6.60 | 9 | 5.30 |
| Missing | 21 | 3.30 | 15 | 3.80 | 18 | 10.70 |
| Total | 638 | 100.00 | 392 | 100.00 | 169 | 100.00 |

Table 2: Principal components analysis with varimax rotation

| Items | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 |
|---|---|---|---|---|---|
| Keeps patients safe by preventing them from leaving the ward | | | 0.457 | 0.403 | -0.337 |
| Makes patients feel trapped | 0.654 | | | -0.309 | |
| Makes patients feel safe and secure | | | 0.313 | 0.7 | |
| Relieves patients from responsibility for themselves | 0.313 | | | 0.55 | |
| Hinders patients' recovery | 0.584 | | | | 0.424 |
| Makes patients calm and relaxed | | | | 0.769 | |
| Increases the likelihood of patients being aggressive | 0.74 | | | | |
| Makes patients more desperate to escape | 0.787 | | | | |
| Makes patients feel worthless or rejected | 0.698 | | | | 0.304 |
| Makes patients more dependent on staff | 0.692 | | | | |
| Stops patients from going out to obtain drugs and/or alcohol | | | 0.671 | | |
| Makes patients feel hopeless or depressed | 0.723 | | | | |
| Keeps the general public safe from disturbed patients | | 0.463 | 0.373 | | |
| Prevents patients from taking responsibility for themselves | 0.654 | | | | |
| Stops patients from leaving the ward and harming themselves | | | 0.582 | | |
| Helps patients' recovery | | | 0.366 | 0.6 | |
| Makes patients angry, irritable or frustrated | 0.78 | | | | |
| Makes patients feel they are not trusted | 0.799 | | | | |
| Makes staff feel more in control | | 0.716 | | | |
| Hardens staff feelings and makes them uncaring | 0.386 | | | | 0.654 |
| Makes staff more relaxed and less anxious | | 0.773 | | | |
| Creates extra work for the staff | 0.388 | | | | |
| Makes staff more strict and over-controlling | 0.512 | | | | 0.591 |
| Makes staff feel safer from complaints, inquiries or litigation | | 0.702 | | | |
| Frees up staff for other work | | 0.697 | | | |
| Keeps patients safe by stopping just anyone coming in | | | 0.632 | | |
| Makes the ward unwelcoming to visitors | 0.362 | | | | 0.628 |
| Helps to keep drugs and/or alcohol off the ward | | | 0.82 | | |
| % of variance explained | 22.06% | 9.48% | 9.32% | 8.50% | 7.24% |

Table 3. Spearman's rank order correlation for door status and perception of door locking

| Participant | | | Factor 1 Adverse effects | Factor 2 Staff benefits | Factor 3 Patient safety benefits | Factor 4 Patient comforts | Factor 5 Cold milieu |
|---|---|---|---|---|---|---|---|
| **Patient** | Locked during the day | Correlation Coefficient | 0.11 | 0.04 | 0.02 | 0.02 | 0.04 |
| | | Sig. (2-tailed) | 0.040 | 0.431 | 0.758 | 0.683 | 0.466 |
| | | N | 349 | 346 | 350 | 345 | 340 |
| | Locked during the night | Correlation Coefficient | 0.00 | 0.03 | 0.06 | 0.03 | -0.06 |
| | | Sig. (2-tailed) | 0.942 | 0.593 | 0.298 | 0.548 | 0.302 |
| | | N | 330 | 327 | 331 | 327 | 321 |
| **Staff** | Locked during the day | Correlation Coefficient | -0.02 | -0.05 | .14** | .19** | -0.06 |
| | | Sig. (2-tailed) | 0.642 | 0.246 | <0.001 | <0.001 | 0.161 |
| | | N | 629 | 627 | 630 | 629 | 626 |
| | Locked during the night | Correlation Coefficient | -0.04 | -0.12 | 0.05 | 0.14 | -0.06 |
| | | Sig. (2-tailed) | 0.313 | 0.003 | 0.255 | 0.001 | 0.154 |
| | | N | 605 | 603 | 606 | 605 | 602 |
| **Visitor** | Locked during the day | Correlation Coefficient | .19** | 0.05 | -0.01 | 0.03 | 0.15 |
| | | Sig. (2-tailed) | 0.028 | 0.597 | 0.947 | 0.702 | 0.076 |
| | | N | 135 | 139 | 137 | 136 | 135 |
| | Locked during the night | Correlation Coefficient | 0.07 | -0.12 | -0.07 | -0.07 | 0.03 |
| | | Sig. (2-tailed) | 0.462 | 0.212 | 0.472 | 0.451 | 0.775 |
| | | N | 110 | 112 | 111 | 111 | 110 |

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