The attitude of nurses towards inpatient aggression in psychiatric care
Jansen, Gradus

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Chapter 6
Cross-cultural Differences in Psychiatric Nurses’ Attitudes to Inpatient Aggression

G.J. Jansen, B. Middel, T.W.N. Dassen, S.A. Reijneveld
(in press: Archives of Psychiatric Nursing)

Abstract

Little is currently known about the attitudes of psychiatric nurses towards patient aggression, particularly from an international perspective. Attitudes towards patient aggression of psychiatric nurses from five European countries were investigated using a recently developed and tested attitude scale. Data were collected from a convenience sample of 1769 student nurses and psychiatric nurses. Regression analysis was performed to identify personal and professional characteristics of the respondents able to predict their attitude towards aggression. ANOVA was used to identify significant differences in attitudes between and among countries. Attitude was predicted by gender, contractual status (full versus part-time) and the type of ward on which subjects worked. With one exception (communicative attitude) attitudes differed across countries. More research on attitude formation is needed to determine which factors account for these differences.

6.1 Introduction

There is an enormous literature on determinants of patient aggression in psychiatric setting. Generally, these determinants are categorized into three domains: 1 characteristics of health professional staff, 2 patient characteristics, and 3 environmental factors. This paper addresses just one aspect of health professional staff determinants – staff attitudes toward aggressive behaviour of patients. Attitudes play an important role in guiding how we react to the behaviour of other people. For this reason, it is important to study the attitudes of psychiatric nurses towards patient aggression. The way nurses manage aggression will be influenced by their attitudes towards the behaviour.
This link between attitude and behaviour is also reflected in Ajzen’s Theory of Planned Behavior (TPB). Central to the TPB is the conception of intention. As the principal predictor of behaviour, intention is regarded as the motivation necessary to engage in a particular behaviour: the more one intends to engage in behaviour, the more likely its performance. Underlying intentions are attitudes towards the behaviour, subjective norms and perceived behavioural control.

In the TPB, attitude is a function of the beliefs held about the specific behaviour, as well as a function of the evaluation of likely outcomes. Attitude, therefore, may be conceptualized as ‘the amount of affect – feelings – for or against some object or a person’s favourable or unfavourable evaluation of an object’. The second determinant of intention subjective norm is defined as perception of general social pressure from important others to perform or not to perform a given behaviour. Perceived control is defined as ‘the perceived ease or difficulty of performing the behaviour’ and is assumed ‘to reflect past experience as well as anticipated impediments and obstacles’ (Ajzen, 1988). This study focuses on the concept of attitudes. Attitude is the tendency to think, feel, or act positively or negatively towards objects in our environment (Eagly & Chaiken, 1998; Ajzen, 2001). Attitudes are derived from salient behavioural beliefs. Furthermore, attitudes are learned predispositions to respond in consistently favourable or unfavourable ways as the result of past experiences. The formation of attitudes is influenced mainly by the principle of learning, like modelling and other forms of social learning (Olson & Fazio, 2001). The social learning theory of Bandura emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others. Social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioural, and environmental influences (Bandura, 1977). From this point of view a common corollary to the hypothesis that attitudes are learned is the idea that attitudes are environmentally determined. That is, if attitudes develop through experience, then it seems to follow that attitudes are determined by environmental factors. One major factor of the environment to affect the formation of attitudes is the national sociocultural values and beliefs. These assumptions are reflected by the conceptual model for the study represented in **Figure 1**.

**Figure 1**

**Conceptual Model of the Study**

Between Environmental Influences and Attitude

**Determinants of Aggression:**
- Patient
- Staff
- Environment

**Attitude Towards Patient Aggression**

**Management of Patient Aggression**

**Occurrence of Aggressive Incidents**
The purpose of the present study was primarily to explore the attitudes of nurses to patient aggression from a multicultural perspective within the field of psychiatry. Secondly, the relationship between attitude towards aggression and relevant personal and professional characteristics of the respondents was investigated. Data were collected in five European countries.

6.2 Literature review

Attitudes towards aggression
A review of the literature on staff attitudes and patient aggression revealed that most items in the research instruments dealing with the topic are related to cognitions of nurses about aggression and not to attitudes. The cognitions nurses have about patient aggression are concerned with the extent of exposure to aggression experienced, the causes and types of aggression, the perpetrators, the management of aggression and the severity of injuries sustained (4). Most attitudinal items were found in the Attitudes Toward Patient Physical Assault Questionnaire (5) and in the Attitudes Toward Aggressive Behaviour Questionnaire (6). Both instruments focus on identical themes, i.e. the attitude towards patient responsibility for aggression, staff safety and competence of staff in managing violent behaviour. Duxbury (7) developed a tool (Management of Aggression and Violence Attitude Scale, mavas) to survey the views of both patients and staff concerning the broader approaches used to manage patient aggression.

International comparative research
Limited information was found in the literature about staff attitudes towards patient aggression across countries, or about predictors of staff attitudes towards aggression. Most studies in the psychiatric field have national samples and the focus in most of these studies is on the comparison between the patient and the staff attitudes towards aggressive incidents (Duxbury, 2002), or on the differences in attitudes between nurses from different types of wards (Duxbury, 1999; Farrell, 1997; Winstanley & Whittington, 2004), or on the attitudes of different clinical disciplines (Farrell, 1999; Nolan, Dalender et al., 1999). Available comparative international research focuses on aggression-related issues other than attitudes, such as the prevalence of aggression and training programs. One study compared five European countries: Italy, Norway, the Netherlands, Sweden and the UK. Large variations were found to exist with respect to the organization of psychiatric services, the training of psychiatric nurses and the methods used by nurses to control and contain disturbed patients (Bowers et al., 1999). In two studies, significant differences were reported with British nurses experiencing more violence than their
Swedish counterparts. The support system for British nurses who had experienced violence appeared to be less well developed than for their Swedish counterparts (Lawoko et al., 2004).

**Determinants of aggression**

In contrast to the literature about attitudes, many studies have been carried out to explore the relationship between the occurrence of patient aggression and staff, patient and environmental variables. One of the staff variables is gender. Whether gender is associated with higher risk of assault is inconclusive. In a study by Carmel and Hunter, male nursing staff were almost twice as likely as female staff to be injured and nearly three times as likely to receive containment-related injuries (Carmel & Hunter, 1989). In contrast, in two other studies no differences were found between male and female nurses and their assault rate (Whittington, 1994; Cunningham, Connor, Miller & Melloni, 2003). In several studies it was found that more inexperienced staff were more likely to be exposed to assaults (Hodgkinson, et al., 1985; Whittington, et al., 1996; Cunningham et al., 2003). Studies on the relationship between time of day and increase in aggression show that most incidents take place in the daytime, followed by the evening, with the lowest rate found during the night. Some studies reported that most assaults occurred during mealtimes and early in the afternoon (Carmel et al., 1989; Lanza, et. al., 1994; Nijman, et al., 1995; Vanderslott, 1998; Bradley, et al., 2001). Others found an increased rate in the morning (Fottrell, 1980; Hodgkinson et al., 1985; Cooper & Mendonca, 1991; Cohen, 1988).

Environmental factors comprise variables such as the type of ward, legal status of the patient on admission (voluntarily admitted or not) and the use of restraining interventions. There is considerable agreement in the literature that ward culture (Katz & Kirkland, 1990) and wards with less ‘stable’ patients (e.g. admission and locked wards) are most often the site of violence (Fottrell, 1980; Hodgkinson et al., 1985; Katz et al., 1990; Nijman, et al., 1997). In several studies it was reported that patients admitted involuntarily under mental health legislation were significantly more likely to be engaged in violent acts (James, et al., 1990; Powell, et al., 1994; Delaney, et al., 2001; Owen, et al., 1998; Soliman & Reza, 2001). In some studies it was concluded that attacks often occurred when nurses were administering medication or leading or restraining agitated patients (Soloff, 1983; Kalogjera et al., 1989; Morrison et al., 2002; Wynn, 2003).

The literature reveals that most studies on the determinants of aggression relate to the occurrence of inpatient aggression in psychiatric settings and not to attitudes of staff towards aggression. The current study explores whether prevalence-related variables (gender, type of ward, years of professional experience of the nurses and working part-time or full-time) are associated with types of attitude towards aggression as well (FIGURE 1).
It can be concluded from this review of the literature that the prevalence and the determinants of aggression are well studied, but as yet, little is known about attitudes of nurses towards aggression, certainly not from an international point of view. For this reason the following research questions were posed:

1. Which factors are predictors of the type of attitude towards aggression from a multinational (European) perspective?
2. Do nurses from different countries have different attitudes towards aggression?

6.3 Material and Methods

Subjects
The total sample ($n = 1963$) was composed of nurses working in psychiatric hospitals and student nurses from 5 countries: Germany ($n = 297$), the United Kingdom ($n = 153$), the Netherlands ($n = 618$), Switzerland ($n = 791$) and Norway ($n = 104$).

Measure
The development of the Attitudes Toward Aggression Scale (ATAS) has been described in earlier studies (Jansen, et al., 1997, 2004, 2005). The ATAS is an 18-item self-reporting scale for the assessment of attitudes of staff members towards the inpatient aggression of psychiatric patients. The ATAS consists of 18 statements that nurses appraise as relevant definitions of aggression (see appendix). The response options vary from ‘totally agree’ with the statement (value 5) to ‘totally disagree’ (value 1). The scale can be used in clinical practice on a group (country) level to monitor the management of aggression by staff. Staff may include all members of the multidisciplinary team directly exposed to the disruptive behaviour. The ATAS comprises 5 types of attitudes, measured by the following subscales:

1. Offensive attitude: viewing aggression as insulting, hurtful, unpleasant and unacceptable behaviour including verbal aggression (7 items)
2. Communicative attitude: viewing aggression as a signal resulting from the patient’s powerlessness aimed at enhancing the therapeutic relationship (3 items)
3. Destructive attitude: viewing aggression as an indication of the threat or actual act of physical harm or violence (3 items)
4. Protective attitude: viewing aggression as the shielding or defending of physical and emotional space (2 items)
5. Intrusive attitude: viewing aggression as the expression of the intention to damage or injure others (3 items)
Since there are no reference scores known with cutoff points, it is impossible to convert a score into a categorical variable: agreement or disagreement. A mean score can only be interpreted in relation to the mean score of another group (country). The higher the score on the scale, the more it matches with the attitude to aggression expressed by that particular scale.

Data collection procedure
Data were collected in collaboration with the participating members of the European Violence in Psychiatry Research Group in their home countries. Each member used his/her own professional network to recruit participants for the present study. The way the samples were accessed varied from country to country, depending on the type of network of the member. This could be a group of nurses working on the wards in a psychiatric hospital where the member of the group was employed, or a sample of nurses with which the network member had a teaching relationship. In another situation the member of the group used the research network of his organization. The eviprg promotes the dissemination of expertise and knowledge among researchers studying psychiatry. Each member nation is represented by experts in research, education, psychiatry, psychiatric nursing, psychology, sociology and trainers specialized in the management of violence. The group has gained wide experience in the translation and cross-cultural analysis of survey instruments. Members of the group have good access to local hospitals and work areas and utilise appropriate occasions to approach large groups of nurses to participate in this study. The uk was the only country in which an institutional review was required specifying the aims, methods and subjects involved in the research project. In the other countries data collection was carried out after informed consent form the nurse managers in charge. No substantial barriers to this research were encountered because there were no patients involved and there was no intervention to be implemented or evaluated.

Analysis
Regression analysis on data of the total sample was performed to answer the first research question, concerning the influences of four characteristics on the type of attitude nurses had towards aggression. These characteristics were gender, part-time of full-time status, years of work experience as a nurse and the type of ward. Three types of wards were identified: admission wards, short-stay wards (treatment or hospitalization for a maximum of two years) and long-stay wards that cared for for people with chronic mental illness who required hospitalization for two years or more.

To answer the second research question concerning the differences in attitudes between countries the significance of the estimated country
effect was tested per scale ($\alpha = .05$) while controlling for the influence of the following predictors of types of attitude, which were the result of the analysis addressing the first research question: 1 gender, 2 years of experience, 3 type of ward and 4 contractual status (ANOVA). By controlling for these predictors, their confounding influence was eliminated. Subsequently, the scale means were grouped in homogeneous subsets of countries (Scheffé). In addition, effect sizes (Cohen, 1977) were calculated in order to interpret the magnitude or relevance of the observed differences in the scores on the attitude scales between countries. Effect sizes ($es$) is the name given to a family of indices that measure the magnitude of a (treatment) effect. Unlike significance tests, these indices are independent of sample size. In general, $es$ can be measured as the standardized mean difference between groups expressed in units of standard deviations. An effect size ($es$) of $< 0.20$ indicates a trivial effect, an $es$ of $\geq 0.20$ to $< 0.50$ a small effect, an $es$ of $\geq 0.50$ to $< 0.80$ a moderate effect and $es > 0.80$ a large effect.

### 6.4 Results

**Socio-demographics**

The demographic and work-related data of the sample are presented in Table 1. The largest samples were from Switzerland and the Netherlands, $N = 791$ and $N = 619$ respectively. Most respondents in the sample were female nurses and had extensive experience (>10 years).

<p>| TABLE 1 | SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS PER COUNTRY |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|</p>
<table>
<thead>
<tr>
<th>GENDER</th>
<th>TOTAL</th>
<th>NORWAY</th>
<th>UK</th>
<th>GERMANY</th>
<th>NETHERLANDS</th>
<th>SWITZERLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>male</td>
<td>752</td>
<td>54</td>
<td>64</td>
<td>73</td>
<td>253</td>
<td>288</td>
</tr>
<tr>
<td>female</td>
<td>1208</td>
<td>47</td>
<td>87</td>
<td>222</td>
<td>356</td>
<td>496</td>
</tr>
<tr>
<td>missing</td>
<td>23</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>YEARS OF EXPERIENCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>690</td>
<td>55</td>
<td>56</td>
<td>54</td>
<td>195</td>
<td>332</td>
</tr>
<tr>
<td>6-10 years</td>
<td>435</td>
<td>30</td>
<td>32</td>
<td>62</td>
<td>175</td>
<td>136</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>795</td>
<td>18</td>
<td>39</td>
<td>177</td>
<td>248</td>
<td>313</td>
</tr>
<tr>
<td>missing</td>
<td>43</td>
<td>1</td>
<td>26</td>
<td>4</td>
<td>–</td>
<td>12</td>
</tr>
<tr>
<td>CONTRACTUAL STATUS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>full time</td>
<td>1187</td>
<td>85</td>
<td>142</td>
<td>235</td>
<td>233</td>
<td>492</td>
</tr>
<tr>
<td>part time</td>
<td>762</td>
<td>18</td>
<td>9</td>
<td>61</td>
<td>377</td>
<td>297</td>
</tr>
<tr>
<td>missing</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>TYPE OF WARD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>admission</td>
<td>692</td>
<td>24</td>
<td>90</td>
<td>97</td>
<td>180</td>
<td>301</td>
</tr>
<tr>
<td>short stay</td>
<td>408</td>
<td>3</td>
<td>13</td>
<td>74</td>
<td>245</td>
<td>73</td>
</tr>
<tr>
<td>long stay</td>
<td>700</td>
<td>74</td>
<td>30</td>
<td>60</td>
<td>148</td>
<td>388</td>
</tr>
<tr>
<td>missing</td>
<td>163</td>
<td>3</td>
<td>20</td>
<td>66</td>
<td>45</td>
<td>29</td>
</tr>
</tbody>
</table>
The number of student nurses is not known. Probably particularly in Germany and the Netherlands students participated in the study which would explain the relatively high number of missing data about the type of ward in these two countries.

Most nurses worked full time (61%) and the majority of nurses (40%) were employed in long-stay wards (Table 1). The internal consistency (Cronbach’s α), the mean scores and the standard deviations on the five scales of the ATAS in each country and for the total sample are presented in Table 2. All types of attitudes proved to have a normal distribution in each country.

<table>
<thead>
<tr>
<th>Scale Component</th>
<th>offensive</th>
<th>communicative</th>
<th>destructive</th>
<th>protective</th>
<th>intrusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of scale items</td>
<td>(7 items)</td>
<td>(3 items)</td>
<td>(3 items)</td>
<td>(2 items)</td>
<td>(3 items)</td>
</tr>
<tr>
<td>Scale scoring range</td>
<td>7-35</td>
<td>3-15</td>
<td>3-15</td>
<td>2-10</td>
<td>3-15</td>
</tr>
</tbody>
</table>

**THE NETHERLANDS (N=571)**
- Cronbach’s α: .83
- Mean inter-item corr.: .42
- Mean: 18.23
- SD: 4.99

**GERMANY (N=252)**
- Cronbach’s α: .87
- Mean inter-item corr.: .50
- Mean: 18.54
- SD: 6.13

**UNITED KINGDOM (N=123)**
- Cronbach’s α: .82
- Mean inter-item corr.: .40
- Mean: 23.26
- SD: 5.86

**SWITZERLAND (N=730)**
- Cronbach’s α: .86
- Mean inter-item corr.: .48
- Mean: 18.10
- SD: 5.86

**NORWAY (N=93)**
- Cronbach’s α: .84
- Mean inter-item corr.: .43
- Mean: 21.06
- SD: 5.75

**COMBINED DATA OF ALL COUNTRIES (N=1769)**
- Cronbach’s α: .86
- Mean inter-item corr.: .46
- Mean: 18.72
- SD: 5.82

The ATAS was found to be a valid measure for the attitudes of nurses and other professionals in a mental health care setting towards inpatient aggression in psychiatry. In an earlier study on the ATAS (Jansen, 2004), the highest Cronbach’s α coefficient was found on the ‘offensi-
ve' scale (.87 in Germany) with a maximum of 7 items. The lowest mean interitem correlation (.33) found was for the 'destructive' scale in the Netherlands and the 'intrusive' scale in the Swiss sample (table 2).

6.5 Predictors of the Types of Attitudes

From this point in the text italics will be used to denote the types of attitudes obtained from the scores on the atas (offensive, communicative, destructive, protective, and intrusive).

The results of the regression analysis (table 3) showed a gender effect for the communicative and the destructive scale. Men had higher scores than their female colleagues on the communicative attitude, but they had lower scores than their female colleagues on the destructive attitude. Furthermore, nurses who worked part time had lower scores than those who worked full time on the offensive, the destructive, and the intrusive attitudes towards aggression. Nurses from the short-stay wards had lower scores on the offensive, the destructive, the protective, and the intrusive attitudes than the nurses from the other two types of wards.

### Table 3

SIGNIFICANT PREDICTORS OF TYPE OF ATTITUDE IN THE TOTAL SAMPLE

<table>
<thead>
<tr>
<th>ATTITUDE</th>
<th>OFFENSIVE</th>
<th>COMMUNICATIVE</th>
<th>DESTRUCTIVE</th>
<th>PROTECTIVE</th>
<th>INTRUSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>total sample (n)</td>
<td>1713</td>
<td>1682</td>
<td>1682</td>
<td>1697</td>
<td>1690</td>
</tr>
<tr>
<td>GENDER</td>
<td>male</td>
<td>male</td>
<td>male</td>
<td>male</td>
<td>male</td>
</tr>
<tr>
<td>AGE: female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPERIENCE</td>
<td>6-10 yrs</td>
<td>.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPERIENCE: &gt; 10 yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPERIENCE: &gt; 10 yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CONTR. STATUS: part-time</td>
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<td>CONTR. STATUS: full time</td>
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<tr>
<td>TYPE OF WARD: admission</td>
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<td>TYPE OF WARD: admission</td>
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<tr>
<td>TYPE OF WARD: short stay</td>
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<td>TYPE OF WARD: short stay</td>
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<td>TYPE OF WARD: short stay</td>
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<tr>
<td>TYPE OF WARD: short stay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r² of the model if:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'country' excluded</td>
<td>.02</td>
<td>.02</td>
<td>.03</td>
<td>.01</td>
<td>.04</td>
</tr>
<tr>
<td>'country' included</td>
<td>.08</td>
<td>.02</td>
<td>.15</td>
<td>.04</td>
<td>.11</td>
</tr>
</tbody>
</table>

rg = the reference group in the regression analysis

The variance explained by each of the five models ranged from 2% to 4% if the variable ‘country’ was excluded from the regression analysis. Except for the communicative scale, ‘country’ proved to be a significant predictor for the scores of nurses on all the other four scales. If ‘country’ as a predictor was added to the analysis, 15% of the variance in the scores on the destructive scale and 11% of the variance on the
intrusive attitude scale could be explained by the models. If the variable ‘country’ was added to the models of the other three scales, no significant contribution to the percentage of variance explained was observed (Table 3).

**Differences in attitudes to aggression across countries**

To answer the second question, the significance of the estimated country effect was tested, corrected for the influence of the predictor effects. The predictors are presented in Table 3. The results of the one-way ANOVA tests are shown in Table 4. We will discuss the results by scale.

Nurses from the five countries appeared not to differ significantly (p < 0.05) the communicative attitude. The mean score ranged from 8.4 in Germany to 9.0 in Switzerland.

Significant differences between countries were found on the other four attitude scales. The UK nurses had the highest mean score for the offensive attitude (23.4), while the Swiss, Dutch and German nurses had the lowest scores for this attitude (group mean, 18.2). When the focus is on the destructive attitude, the UK nurses and the German and Norwegian nurses had significantly higher scores this attitude (group mean 11.6) than the Dutch and the Swiss nurses. The UK nurses had the lowest scores for the protective attitude; the Norwegian nurses the highest score. Finally, the UK nurses had the highest score on the intrusive scale (9.6) compared to the scoring by the nurses from the other four countries.

**Magnitude of the differences**

To calculate the magnitude of the differences found between the country scores on the attitude scales, we used Cohen’s effect size statistic ‘d’ (Table 4). The effect sizes found between (groups of) countries varied from ‘trivial’ to ‘large’ according to Cohen’s thresholds. Most differences detected were classified as ‘large’ (75%) and related to the offensive attitude, while most ‘small’ differences (16%) were found with respect to the protective attitude. One ‘trivial’ difference (0.15) was found between the scores of Switzerland and the mean scores from the United Kingdom, Germany and Norway on the destructive scale.

**Patterns of the differences**

Two patterns manifested themselves in the way the types of attitudes were scored across the countries. The first pattern related to the way the UK nurses scored. They had the highest score for both the offensive attitude (23.4) and the destructive attitude (11.4), along with the German and Norwegian respondents. In addition, the UK nurses had the highest score for the intrusive attitude. However, their scores for the protective attitude were the lowest of all countries (5.6). According to the effect sizes calculated, these differences had to be classified as
<table>
<thead>
<tr>
<th>ATTITUDE</th>
<th>low mean (sd)</th>
<th>moderate mean (sd)</th>
<th>high mean (sd)</th>
<th>mean (sd)</th>
<th>mean (sd)</th>
<th>mean (sd)</th>
<th>mean (sd)</th>
<th>es</th>
<th>es</th>
<th>es</th>
</tr>
</thead>
<tbody>
<tr>
<td>offensive</td>
<td>Switzerland (n = 735)</td>
<td>18.1</td>
<td>20.9</td>
<td>23.4</td>
<td>18.2</td>
<td>20.8</td>
<td>23.4</td>
<td>.46</td>
<td>.44</td>
<td>.92</td>
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Cohen's effect size thresholds: • trivial, •• small, ••• moderate, •••• large
The second pattern found was the grouping of Switzerland and the Netherlands and Germany. Respondents from these countries had identical scores for the offensive and the protective attitudes and, except for Germany, on the intrusive scale as well.

6.6 Discussion

The objective of this study was to explore the differences in the attitudes of psychiatric nurses towards patient aggression from an international (European) perspective. Five types of attitudes were investigated. The study started with an identification of the predictors for the various types of attitude in the total sample. We will discuss three of them: gender, contractual status, and the type of ward.

A gender effect was found for the destructive and communicative attitudes. In the total sample men appeared to disagree more than their female colleagues with the destructive attitude and to agree more with the communicative attitude. What do these findings mean? The first finding indicates that female nurses, more than their male colleagues, perceived aggression as a destructive phenomenon. We think that this result can be explained by the notion that in general female nurses feel more intimidated by the verbal and physical expressions of aggression than male nurses. In our opinion the latter result, i.e. male nurses more than the female nurses experienced aggression as an attempt to communicate, was related to the first finding. It seems likely that men, more than women, had the option of perceiving the relational dimension of aggressive behaviour because they felt less intimidated and afraid. We know from experimental cognitive psychology that with anxiety, memory, attention and reasoning are affected. A person is overwhelmed by emotions and unable to attend to external events, and he or she is concentrated on their own feelings of distress (Eysenck, et al., 1987).

In addition to gender as a predictor, we found that nurses working part time had lower scores than those who worked full time for the offensive, the destructive and the intrusive attitudes towards aggression. We asked ourselves two questions. Firstly, why did we find a significant relation between contractual status and this combination of attitude scales, and, secondly, why did we find this with the part-time workers in particular? In answer to the first question it must be noted that the common factor in the offensive, destructive and intrusive attitudes towards aggression can be labelled as the perspective that it is violent and harmful, while the protective and communicative attitudes can be characterized as the more tolerant view towards aggression. From this perspective, it is obvious that an effect was found on the combination of these specific scales. The finding that part-time workers agreed less with these attitudes than full-time workers might be attri-
but to the fact that part-time workers had less opportunity than full-time workers to become involved in violent incidents. The underlying rationale is that the more violent situations you have experienced with a client, the more you will agree with the destructive, intrusive and offensive attitudes.

The third predictor to discuss is the finding that nurses from admission wards agreed less with the protective and communicative attitudes than the nurses from the other two types of wards. As mentioned before, these two scales represented the more permissive, tolerant attitudes towards aggression. In the literature review we showed that admission wards more than the others wards are often the site of violence. Reasoning by means of analogy with the explanation given for the predictor effect of the part-time workers, it can be argued that nurses working on admission wards, being the victims of violence more often, had less affinity with these two attitudes than the nurses from the short and long-stay wards.

To conclude the discussion about the predictors, the issue of the percentage of variance explained by the models is addressed here. The percentage of variance that was explained by all five models proved to be very small. If the variable ‘country’ was added to the models, we found an increase in the percentage of variance explained, of 12 % on the destructive scale and of 7 % on the intrusive scale. From this finding, it can be concluded that for the scoring of these two scales the cultural background of respondents was important.

We now come to the main focus of this study, differences in attitudes between countries. The overall conclusion that can be drawn from this study is that nurses from the five European countries had different opinions about four types of attitudes. The majority of these differences were classified as ‘large’. No difference between countries was found with respect to the communicative attitude.

There were two patterns in the divergence of attitudes that caught the eye. In the first place there is the scoring of the UK nurses. They had the highest scores on the offensive, intrusive and destructive attitude scales. This means that the UK nurses agreed, more than the respondents from any other country in the study, with the violent, harmful perspective on aggression. On the other hand, they agreed less than any other country with the more tolerant attitude towards patient aggression (protective scale).

The second result we want to highlight is that the Swiss, German and Dutch nurses had identical scores for the offensive and protective attitudes and, except for the German nurses, for the intrusive attitude as well. The Norwegian nurses seemed to hold a kind of middle position between the UK on the one hand, and the Dutch, Swiss, and German nurses on the other. How can these patterns be accounted for?

It was argued above that attitudes have an impact on the management of client aggression by nurses (Figure 1). For that reason the intrusive...
sive and destructive attitudes, i.e. the idea that aggression is violent and harmful, would result in more restrictive methods of managing violent behaviour. If we look at what we know from earlier studies about the current management styles in some of the countries, we can link these styles to the prevailing attitudes we found in a particular country. From the study of Bowers et al. (1999) we know that mechanical restraint is not practiced in the UK, in contrast to Norway. Seclusion is abhorred in Norway, but is applied in the UK and in the Netherlands. In our opinion, all these styles represent interventions that are coercive in nature, and therefore each of these approaches is linked to the intrusive or destructive attitudes. To make a valid link with the management styles and the communicative and protective attitudes, it is vital to have cross-cultural information about the non-restraining interventions, such as talking down and other de-escalation techniques.

What other plausible explanations can be found for the different attitudes across countries? As stated in the introduction, the problem in finding clarifications other than from the findings within this study is that from a cross-cultural perspective, only limited knowledge is available from earlier research on staff attitudes and patient aggression. This gap in knowledge hampers any attempt to offer valid explanations. If we focus on the variables in this study we have to conclude that the four characteristics of respondents which were included because they were determinants of patient violence, proved to be inadequate to explain the differences in attitudes found between the countries. Obviously, variables other than the determinants of aggression have to be studied to gain insight into what caused the cross-cultural differences.

However, two sources of bias may have affected the results: 1 Since the hospitals were used as sample-units, selection bias may have resulted in samples that are not representative for the populations of nurses working in the psychiatric hospitals from the counties participating in the study. 2 The statistical conclusion validity may be weakened by the fact that statistical tests for simple random samples were applied on data from convenient samples.

In order to reduce both sources of confounding, in a follow-up study random sampling from the strata gender and age is indicated.

Finally, we would like to comment on attitude change. We have talked about country attitudes in this study of psychiatric nurses towards client aggression as if they were static. The data that were collected in the study came from a cross-sectional design. This means we have no information about the variation in attitudes over time. According to social psychologists (Schwarz & Bohner, 2004), attitudes have three components, cognitions, feelings and behaviour. An attitude will change over time as its components change. Cognitions and feelings
can change under the influence of past experiences with violence on a ward or even under the influence of violent events occurring outside a hospital. Public acts of violence, such as terrorist attacks and victimization, will have an impact on public opinion about violence. Nurses’ attitudes towards client aggression will be affected by public opinion as they are also members of the community or society.

In conclusion, this study demonstrated that there are different attitudes of nurses towards patient violence in psychiatric inpatient settings across countries. We also showed that the variance in attitudes found between countries could not be predicted adequately by the variables in this study. Cultural variance in attitudes towards aggression is not a problem, of course. What is important is to gain a better understanding of the factors that account for the differences in attitudes. Another possible effective way of addressing the issue would be to concentrate on the process of attitude formation within the work setting. According to Bandura (1999) attitudes are formed by modeling and other forms of social learning. Social learning is a powerful source of the socialization process through which nurses learn about which behaviour is and is not appropriate in their (professional) culture. To enable research in this direction we first have to consider what important patient, client and environmental effects there are on the social learning of nurses who deal with aggression.

**Implications**

This study reveals that psychiatric nurses differentiate in the way they evaluate aggressive behaviour of psychiatric clients. This finding is in contrast to the negative connotation of the phenomenon of aggression predominantly found in the literature. In this study psychiatric nurses from different countries were found to appraise the aggressiveness as positive energy as well. This finding is important input for both clinical practice and training programmes aiming at the management of aggression. In European countries training programs such as Control and physical Restraint (C&R) address and emphasize the violent and physical dimension of aggressive behaviour because of the damaging impact physical aggression may have on the victim. However, this cross cultural study shows that it is relevant to stress also the other side of the medal in such educational programmes. Since role models are important in attitude formation or attitude change, it is important that staff members such as trainers and ward managers make and keep nurses aware of and sensitive to the positive attitudes to aggressive client behaviour.
Acknowledgments
This study was supported by the European Violence in Psychiatry Research Group (EViPRG). We are indebted to those members who collected the data for this study in their countries. We would like to thank C. Abderhalden (Weiterbildungszentrum für Gesundheitsberufe, Arau, Switzerland), R. Alnvik (NTNU, Trondheim, Norway), L. Bowers (City University, London, UK), I. Mamier (Humboldt University, Berlin, Germany).
Appendix

The Attitude Towards Aggression Scale (ATAS)

Aggression ...

**offensive**
1. is destructive behaviour and therefore unwanted
2. is unnecessary and unacceptable behaviour
3. is unpleasant and repulsive behaviour
4. is an example of a non-cooperative attitude
5. poisons the atmosphere on the ward and obstructs treatment
6. in any form is always negative and unacceptable
7. cannot be tolerated

**communicative**
8. offers new possibilities in nursing care
9. helps the nurse to see the patient from another point of view
10. is the start of a more positive nurse relationship

**destructive**
11. is when a patient has feelings that will result in physical harm to self or to others
12. is violent behaviour to others or self
13. is threatening to damage others or objects

**protective**
14. is to protect oneself
15. is the protection of one’s own territory and privacy

**intrusive**
16. is a powerful, mistaken, non-adaptive, verbal and/or physical action done out of self-interest
17. is expressed deliberately, with the exception of aggressive behaviour of someone who is psychotic
18. is an impulse to disturb and interfere in order to dominate or harm others
Reference List


