SUMMARY
The attitude of nurses towards inpatient aggression in psychiatric care; the development of an instrument.

Introduction
Among professional health care workers, nurses are more likely than other staff members to be involved in aggressive incidents with patients. Estimates show that nurses have to deal with verbal or physical aggression on an almost daily basis. One of the main reasons for their increased risk of being involved in aggression is that nurses, more than any other professionals, have multiple interactions with patients. Professional skills – cognitive and behavioural – are needed to manage patient aggression adequately. However, besides technical skills, the attitude of nurses to the behaviour is an important element in the provision of professional care. Hence, the major assumption underlying this thesis is that the type of intervention nurses decide upon will be determined by their attitude to the aggressive behaviour of the patient. For this reason, the objectives of this dissertation are to explore the attitudes of nurses towards patient aggression and to describe the characteristics of nurses and their working environment which determine their attitude to aggression.

Chapter 1
This dissertation starts with an overview of the literature on aggression in health care, specifically in psychiatry. The literature on aggression in psychiatric settings shows that inpatient aggression is multi-causal. Three categories of determinants of aggression are described: patient factors, staff factors and environmental variables. This dissertation is about the attitudes of nurses to patient aggression. In the terminology of theories about attitudes, aggression by patients is understood as the attitude object, whereas the management of aggression by nurses is conceived of as the behaviour to be predicted by the attitude, that is, the nurses’ attitude towards patient aggression. The theoretical model adopted to support the relation between attitude on the one hand and behaviour on the other, is Ajzen’s Theory of Planned Behavior (TPB). In the Theory of Planned Behavior ‘attitude’ together with ‘subjective norm’ and ‘perceived control’ are the building blocks for the prediction of human behaviour. The subjective norm indicators are derived from the literature the occurrence
describing the occurrence of patient aggression. These factors all contribute to the social work environment and the occupational culture of nurses and thereby contribute to the perception of a social pressure to perform particular ‘management behaviour’. The concept of ‘perceived control’ is not part of the thesis (Figure 1).

The primary aim of the thesis is to develop a valid and reliable instrument to measure the attitudes of staff to aggression displayed by patients who are admitted due to psychiatric problems. The tool can be useful in clinical practice on a group level for the assessment of the staff attitudes towards aggression. The tool is devised to support the decision-making about the management of aggressive behaviour on a ward. As there is also a lack of knowledge about the attitude of staff in various countries, the tool should facilitate international comparative research.

The second aim of the thesis is to explore the question of which factors are related to the attitude towards aggression. If we have an understanding of how attitudes to aggression are formed and how they develop over time and in the work setting, the possibility of acting upon them arises, if that is wanted or asked for. As some types of aggression displayed by patients may provoke adverse feelings in psychiatric nurses, aggression management courses, supervision, or other ways of supporting teams, for example group counselling and debriefing provide ways of alleviating those feelings.

Chapter 2

Chapter 2 presents a comprehensive search of the literature on attitudes towards aggression. It reveals that little is yet known about the attitudes of staff towards aggression by patients and that no structured research or clinical tools are available to measure attitudes to
aggression. Most items in the survey questionnaires appear to be related to the cognitions of nurses concerning aggression and not to their attitudes. Only about a quarter of all items investigated are by nature a question of attitude, meaning that these items expressed an evaluation of aggressive patient behaviour by nurses. Objective data included staff data such as age and years of experience, while patient characteristics included age, diagnosis and length of hospitalization. The opinions, ideas, beliefs and views or cognitions that nurses had about patient aggression were related to the extent of exposure to aggression, the causes and types of aggression, the perpetrators, the management of aggression and the severity of injuries sustained. This review shows that research on attitudes towards aggression in health care addresses diverse items.

Most attitudinal items were found in three instruments: 1 The Attitudes Toward Patient Physical Assault Questionnaire, and 2 the Attitudes Towards Aggressive Behaviour Questionnaire, and 3 the Perception of Aggression Scale. Both 1 and 2 focus on identical themes, that is, the attitude towards patient responsibility for aggression, staff safety and competence in managing violent behaviour, while the third instrument is concerned more with the appraisal and characterization of patient aggression by nurses. Most scales lack profound validity testing. To give a more scientific basis to studies of attitude in relation to aggression, the development of a new scale is described in the next chapter.

Chapter 3
This chapter describes the first empirical study using respondents from five Dutch psychiatric hospitals. A total of 60 statements (see APPENDIX 1) about the nature of inpatient aggression as perceived by psychiatric nurses were presented to the sample. In answer to the first research question pertaining to the perceptions, as the domains were called at the time, Mokken analysis produced three distinct perceptions of aggression:

• aggression as a normal reaction to feelings of anger
• aggression as a violent and threatening reaction and
• aggression as a functional reaction.

In developing the scale, the number of items was reduced from 60 to 29. As to the internal consistency of the scale, it is concluded that the reliability of the subscales was sufficient. The average inter-item correlation of 0.30 is sufficient. It is concluded that according to nurses, the interpretation of aggressive behaviour is multi- rather than one-dimensional.

In four of the eleven personal and environmental variables associated with the occurrence of aggression in the literature, a relationship was found with the way aggression was perceived:
The gender of the respondents, the setting they were working in, whether patients were voluntarily admitted or not, and the degree to which they used constraint measures on the ward, were related to the perception of aggression. To illustrate the last finding, nurses working on wards where constraint measures were not applied, proved to be more positive about the functional dimension of aggression, perceiving it as being more normal and functional than nurses on wards where constraint measures such as fixation and separation occurred. This first study points out that existing instruments for measuring the prevalence of aggression such as the MOAS captures a different aspect of aggressive behaviour. The added value this study offers is that nurses attribute diverse meanings to the aggressive behaviour of patients.

Chapter 4

Chapter 4 gives an account of a study in which two additional groups of nurses were included. The study sample is expanded with two samples: nurses from psychiatric hospitals for children and adolescents in the Netherlands and the second group is comprised of 88 nurses from a psycho geriatric nursing home. Again, in this survey the participants were asked to give their opinion about the aggressive behaviour of patients as they experienced it in their work environment. Rather than the 32-item scale, for the second time the entire set of 60 statements was presented to the respondents. Explorative factor analysis is used as a method to identify the different perceptions or attitudes as they were now called. The concept of ‘attitude’ is introduced into the study, since it expresses the degree of the affect for or against aggressive behaviour more adequately than ‘perception’. The degree of affect is measured by asking respondents to indicate their degree of approval or disapproval of each statement presented in the questionnaire using a Likert type scale.

Consistent with the results found in the previous study three attitude domains or dimensions are identified:

- the attitude by which aggression is assessed as a normal reaction (12 items)
- the attitude by which aggression is evaluated as a harming reaction (17 items)
- the attitude which implies that aggression is experienced as functional behaviour (3 items)

The Cronbach’s $\alpha$ coefficients are 0.82, 0.87 and 0.50 respectively. Male and female nurses had different scores on the normal attitude towards aggression. Male nurses, more than their female colleagues, considered aggression to be a normal reaction. However, female nurses had higher scores on the functionality, or instrumentality, of aggressive behaviour than their male colleagues. It was found that nurses from the psycho-geriatric nursing home had higher scores on
the harming and normal reaction than respondents from the other two sectors. Furthermore, the study showed that the most experienced nurses supported the attitude that aggression is a functional reaction less often than novice nurses. It was also found that nurses from the child psychiatric hospitals had higher scores on the attitude that evaluates aggression as functional behaviour than the respondents working in the nursing home for the demented elderly and in the adult psychiatric hospitals.

The factorial structure of the ATAS consists of a three-component scale. In this study the domains found are compared to the typologies of aggression that are mentioned in the literature. ‘Affective aggression’ comes close to what is called ‘the harming reaction’. What is labelled in the study as the ‘functional reaction’ can be rephrased as ‘instrumental aggression’. Finally, what is called the ‘normal reaction’ in the study is comparable to ‘reactive aggression’, as it is called in the literature. The discussion of the study takes the position that the strongest attitude towards aggression measured on a ward using the ATAS should be a reflection of the type of aggression most prevalent on the ward.

Chapter 5

Chapter 5 reports on a study in which the invariance of the components (construct validity) of the ATAS is tested in an international sample. The sample comprises nurses from five European countries. Not three but five components or factors, expressing nurses’ attitudes towards aggression by inpatients in psychiatry are identified, this time in all five countries.

The attitude components are:

- Offensive in the sense of insulting, hurtful, unpleasant and unacceptable behaviour including verbal aggression;
- Communicative, in the sense of a signal resulting from the patient’s powerlessness aimed at enhancing the therapeutic relationship;
- Destructive, a component indicating the threat or an actual act of physical harm or violence;
- Protective, indicating the shielding or defending of physical and emotional space;
- Intrusive, expressing the intention to damage or injure others.

The psychometric properties of the ATAS were satisfying. The small differences in variances found in each country imply that the same linear combination of variables could be used in all populations to describe the data adequately. The internal consistency (Cronbach’s α) of the five subscales was rather satisfactory. For all countries, the reliability coefficients can be considered as good for the ‘offensive’ scale (0.86) and somewhat lower for the other four scales (about 0.60).
The configuration of correlations between the components of the ATAS scale found in all five countries suggested the existence of two basic underlying divergent domains in the scale, with the scale components ‘communication’ and ‘protection’ at one end and the components ‘offence’, ‘destruction’ and ‘intrusion’ at the other. The domains can be regarded as divergent because of the negative correlations found between the two sets. The convergent combination of ‘communication’ and ‘protection’ may be characterized as positive human energy or behaviour, in contrast to the attitudes termed as ‘offence’, ‘destruction’ and ‘intrusion’ that may be considered to be the violent and negative perspective on aggressive behaviour. In the first scale study (Chapter 3) three subscales were identified and labelled as the harming, the functional and the normal attitude domain of aggressive behaviour. The items of the earlier ‘violence’ domain are now spread out over three separate scale domains, differentiating between the disapproval of the behaviour (offensive), a physical act of violence without expressing a value statement (destructive), and the intent to hurt or dominate others (intrusive). The items that made up the ‘normal’ and ‘functional’ scale domain in the earlier study were reclassified in this study as the ‘protective’ and the ‘communicative’ perspectives on aggression.

According to a one way analysis of variance, the mean values on four of the five subscales were significantly different across the five countries. The same holds for the ATAS scale as a whole. Additional research is required to acquire an understanding of which factors may account for these differences.

The analysis of the data of this study started with 32 items. In the international study more components were extracted than was the case with the original scale, five now being used as opposed to three initially, and with a reduced number of items in the final scale. The original scale’s 32 items, were reduced to 18, making the ATAS easier to administer. The conclusion is that this study offers a valid instrument for international research. Although the study population was limited to psychiatric nurses and student nurses, aggression by patients is not a phenomenon exclusive to psychiatric or mental health care. Aggression by patients towards staff is an issue and often a problem in general health settings as well. For this reason the instrument is not merely suited to nurses, but it is also helpful for other professionals who have to deal with aggression in a mental health care setting.

Chapter 6

In Chapter 6 a report is provided from a cross-cultural perspective concerning the differences in attitudes psychiatric nurses have towards patient aggression. The five attitudes described in Chapter 5 were investigated. The study started with the presentation of five regressi-
on models to identify the predictors for each type of attitude in the total sample. A gender effect was found for the ‘destructive’ and ‘communicative’ attitude. 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. It was also found that nurses who worked part-time had lower scores on the ‘offensive’, the ‘destructive’ and the ‘intrusive’ attitude towards aggression than those who worked full-time. The third predictor of the type of attitude that was found was that nurses from admission wards agreed less with the ‘protective’ and ‘communicative’ attitude than the nurses from the other two types of wards. With regard to the predictors of attitudes it was concluded that the percentage of variance that was explained by all the five models was very small. With respect to the differences in attitudes across countries, it was concluded that the nurses from the five European countries had different opinions on four of the five types of attitudes. The majority of these differences were classified as ‘large’. No difference between countries was found with respect to the communicative attitude domain.

The UK nurses, more than the respondents from any other country in the study, agreed with the violent, harming perspective on aggression, they also agreed less with the more tolerant attitude towards patient aggression (protective scale) than respondents from any other country.

The Swiss, German and Dutch nurses had identical scores on the offensive and protective attitudes. The Norwegian nurses seemed to hold a middle position between the UK on the one hand and the Dutch, Swiss and German nurses on the other. The conclusion is that although attitudes to aggression differ from country to country, the study failed to reveal what factors account for this finding. Several reasons are discussed that might explain this result.

**Chapter 7**

This final chapter provides a general discussion of the dissertation. After summarizing the main results pertaining to the different domains found as measures of the attitude of nurses to patient aggression, and to the variables that predict the attitude of nurses, various methodological considerations are reflected upon. One of the issues discussed is the consistency of the ATAS-items in the various versions throughout the reduction process. Some items are consistent through all three versions of the measure, others are not. Several reasons are discussed to explain this result. The chapter ends with some recommendations for the use of the ATAS in clinical practice and research. One of the recommendations for future research relates to the predictors of the attitudes. This thesis failed to identify factors that are predictive for the type of attitude. Therefore, it is recommended that future studies should include other variables besides the
subjective norm indicators and the personal characteristics that are used here. Preferably these factors should relate to attitude formation principles such as social learning within educational programmes and the work setting (intervision and supervision).

This thesis gives a report on the development of an instrument for measuring the attitudes of psychiatric nurses to patient aggression. Now that the report is finished and the results are discussed, it is time to make a final remark. The question must be raised concerning the extent to which this thesis adds to our knowledge of aggression. To start with it should be noted that in psychiatric care, more than in general care, patient accountability for behaviour plays a major role. At the outset of this thesis and with the development of the ATAS, this difference between the two health sectors or patient categories was also thought to have consequences for differences in the attitudes of nurses to aggression. The measure that was developed in this thesis shows that nurses do make these kinds of differentiations. This result shows that nursing is a profession, and that a profession requires professional attitudes.