HANNA TUVESSON

PSYCHIATRIC NURSING STAFF AND THE WORKPLACE

Perceptions of the ward atmosphere, psychosocial work environment, and stress
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To all nursing staff who work in psychiatric in-patient care
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ABSTRACT

Major changes have taken place in psychiatric care in Sweden as well as in other countries. These changes, and the current climate of pressure and demands on the nursing staff in psychiatric in-patient care, make it important to be able to understand the relationship between environmental aspects and the nursing staff’s working conditions. The overall aim of the present thesis was to investigate perceptions of the ward atmosphere, the psychosocial work environment and stress among nursing staff working in psychiatric in-patient care. The findings were based on two questionnaire surveys (65 + 93 participants) and were analyzed using non-parametric statistics. The findings showed that a revised Swedish version of the Ward Atmosphere Scale involved some reliability problems that need to be addressed in future studies. Several aspects of the ward atmosphere were found to be related to the psychosocial work environment, and aspects of the ward atmosphere and the psychosocial work environment were related to the nursing staff’s Perceived Stress and Stress of Conscience. The nursing staff’s sense of Mastery was found to be a protective factor against Stress of Conscience, while a Sense of Moral Burden increased the vulnerability. Taking these aspects into consideration when making improvements in the workplace could help to prevent stress.
The present thesis contains the following original papers, which are referred to throughout the text by their Roman numerals:


II. Tuvesson, H., Wann-Hansson, C., & Eklund, M. The ward atmosphere important for the psychosocial work environment of nursing staff in psychiatric in-patient care. *Submitted for publication.*


The above Papers have been reprinted with kind permission from the publishers. The author of this thesis has performed all of the data collection and analysis of the four papers on which this thesis is based. These papers were written with support from the co-authors.
INTRODUCTION

Most people gain a sense of the overall atmosphere of a psychiatric in-patient ward when entering it (Edvardsson, 2005). This atmosphere may reflect characteristics of the people and of the overall psychosocial environment in that setting. How the atmosphere is perceived may also be affected by the individual’s past experiences and expectation, together with his/her reason for entering the setting. Psychiatric care provides help, support and treatment to individuals with different psychiatric problems. It is a platform for interaction and meetings for both patients and staff. Although psychiatric in-patient care is mostly concerned with the care and treatment of patients, it is also a workplace for a large number of nursing staff and their situation needs to be recognized. The present thesis addresses the nursing staff’s work situation in psychiatric in-patient care. More specifically, it addresses the relationships between perceptions of the environment, in terms of the ward atmosphere, psychosocial work environment, and personal reactions such as stress and stress of conscience, while also acknowledging the role of moral sensitivity and personal resources in terms of perceived control. In a climate of ongoing change and high demands on nursing staff working in psychiatric in-patient care, an understanding of the relationship between these aspects may contribute to the identification of new ways for improving the nursing staff’s working conditions.
BACKGROUND

Past lessons and present challenges

Attitudes, knowledge and understanding change with time. However, history may influence the expectations of both patients and staff and how they react to and perceive the environment in psychiatric in-patient care. Warelow and Edward (2007) proposed that a historical component and linking the past with the present may be required in order to get insight into psychiatric care. Following on from their proposal the present thesis will include a brief résumé of the historical and the contemporary conditions in psychiatric care, and especially those in psychiatric in-patient care.

The care and treatment of psychiatric problems have varied throughout history depending on how they have been understood and have often been described as inhuman and violent (Gostin, 2008; Leff, 2001). One indication of the importance of environmental matters on psychiatric patients may be exemplified by the moral treatment principles of Philippe Pinel. In 1792, he released the inmates from insane asylums in Paris and removed their chains. As a consequence, of being free and able to move around, most of the patients ceased being violent (Ajanki, 1999). Another major marker in the history of psychiatric care concerns the use of large institutions for patient care. The purpose of building institutions was to create safe and secure environments for the patients, along with providing work and activities. Critique has, however, been raised against the inhumanity, ineffectiveness and inefficiency of the institutions (Klerman, 1977). Moreover, the institutions have been described to violate civil liberties, destroy human dignity (Grob, 1977) and create a depersonalization and social barrier between patients and staff (Goffman, 1961). Such critiques were one of the triggers of the deinstitutionalization process, together
with the introduction of so-called tranquilizers, which contributed to making the deinstitutionalization possible (Klerman, 1977; Leff, 2001).

The term deinstitutionalization refers to the process that occurred in North America and Western Europe and that entailed the transfer of psychiatric care from large mental hospitals to the community (Leff, 2001). The deinstitutionalization in Sweden occurred in the 1980s and the re-organized psychiatry was characterized by an increase in outpatient psychiatric care and a reduction in the number of hospital beds. There are few areas of the health or social work sectors where significant structural changes have occurred as rapidly and widely as in the psychiatric field (Klerman, 1977) and it has been argued that the communities were unprepared for the deinstitutionalization (Mechanic, 2007). The psychiatric care system has also been radically changed, in Sweden as well as in other countries, due to new technology, shifts in community attitudes and changes in public policies, such as the Swedish mental health reform in 1995 (World Health Organization [WHO], 2005). A purpose of this reform was to improve the situation for people with psychiatric disorders by, for example, developing housing support and opportunities for meaningful daily activities and promoting their influence and participation (National Board of Health & Welfare, 1999).

The working conditions for the nursing staff have, throughout history, been very poor, their main tasks often being the containment of patients (Norman & Ryrie, 2004). Although psychiatric care has changed for the better in many aspects, there is still much to be done (Mechanic, 2007). Concern about the global shortage of psychiatric staff, low nurse-patient ratio, and poor work environments within psychiatric care has been reported (World Health Organization [WHO], 2007). Furthermore the National Board of Health and Welfare in Sweden (2003) proposed that work related stress is a major problem in Sweden today, especially among individuals who work with humans, such as nursing staff. Moreover, recent publications have emphasized the importance of recognizing the role of the nurse in psychiatric care (WHO, 2007), the difficulties of ensuring quality patient care (Shen, Chiu, Lee, Hu & Chang, 2011), and the high demands and organizational pressures on the nursing staff in the complex psychiatric care system (Cleary, 2004).

There are 21 county councils in Sweden and each county council is responsible for the specialized psychiatric care in that area, such as the psychiatric inpatient care (Swedish Association of Local Authorities & Regions, 2010; Tianrien & Rehnberg, 2010). The majority of the staff who work in Swedish psy-
chiatric in-patient care consist of registered nurses and nurse assistants (in the present thesis termed nursing staff). Registered nurses have a three-year university education leading to the degree of Bachelor of Science in Nursing, and some also have a post graduate education or a Master degree in psychiatric nursing. The nurse assistants’ educational level varies, from a formal high school education with a nursing profile to two years of training after high school, or with no formal education at all within the nursing field.

The development of psychiatric nursing has followed the developments of psychiatric medicine in many aspects (Norman & Ryrie, 2004). Today, psychiatric nursing is based on several different perspectives such as medicine, psychology, and philosophy and the nurses’ work is characterized by multiple and complex tasks (Bowers, Allan, Simpson, Jones & Whittington, 2009). The present challenges of today’s psychiatric in-patient care may be partly explained by the previous changes that have occurred in psychiatry (Cleary, 2004), but also by the fact that changes and challenges seem to be a continuous issue in psychiatric in-patient care. The work situation of the nursing staff seems vital to investigate because of this rapid turnover in policies and organization of psychiatric care, and the pressure this puts on the nursing staff.

The person-environment relationship

The present thesis addresses environmental and individual aspects, and their interplay, in order to be able to understand the nursing staff’s working conditions in psychiatric in-patient care. The importance of considering both the environment and the person when trying to understand the work situation has gained a great deal of interest in the literature. Two major models that consider the person-environment relationship have served as a foundation for this understanding in the present thesis. These two models represent a transactional approach which emphasizes the interplay and interaction between a person and his/her environment in a dynamic and active process (Lazarus, 2006; Moos, 2002).

Moos’s (2002) model incorporates five Panels;
- Panel I Environmental system (social climate, ongoing stressors and resources)
- Panel II Personal system (biogenetic characteristics and personal resources such as cognitive and intellectual abilities, self-confidence and
social competence, optimism, extroversion, commitments and aspirations)

- Panel III Transitory conditions (new life events, participating in interventions and treatment programs)
- Panel IV Cognitive appraisal and coping skills (approach and avoidance, cognitive and behavioral)
- Panel V Health and well-being (psychosocial functioning; maturations)

The model emphasizes mutual feedback between the Panels, and Panels I-III shape Panel IV, the cognitive appraisal and coping skills. Further, Panel IV influences the health and wellbeing of an individual (Panel V).

Lazarus’s (2006) model focuses on how individuals appraise, cope and perceive stress. The revised model incorporates the following three areas: Antecedents, including the Person (goals and goals hierarchies, beliefs about self and world, personal resources) and the Environment (harms/losses, threats, challenges, benefits). The antecedents influences the second area in the model, Processes, including the Person-Environment Relationship and Appraisal, which in turn lead to a Relational Meaning, Coping, and a Revised Relational Meaning. The final area consists of Outcomes in terms of emotions and effects.

Although Moos (2002) focuses on the social climate and Lazarus (2006) more on the cognitive evaluation of a situation or event, both models share some common themes. The ward atmosphere (Panel I) and nursing/treatment aspects (Panel III) are focused in Moos’s (2002) model while the stress process is emphasized in Lazarus’s (2006) model thus making both these models important for the present thesis. Furthermore being as the models have great similarities they were combined into one single scheme for framing the present thesis, which is thus based on Moos’s (2002) model of the interplay between contexts, coping and adaption and Lazarus’s (2006) revised model of stress and coping (see Figure 1).

The figure incorporates six areas, the first of which is the Environment, including the ward atmosphere, work environment, ongoing stressors, challenges and benefits. The second area, the Person, includes individual characteristics and personal resources such as cognitive and intellectual abilities, self-confidence and social competence, optimism and commitment, and personal goals and beliefs. These two areas form The Person-Environment Relationship and help to shape the other areas of the figure, including the Transitory Con-
ditions which incorporate different life events, participating in interventions and treatment programmes, the fifth area which is about a person’s *Appraisals and Coping* strategies, and the final area, *Outcome*, which comprises a person’s health and well-being, and emotions and their effects. All these six areas are mutually related to each other. Appraisal and coping are considered to be mediators which transmit and alter the influence of the other areas in the figure. Moreover, the transactional approach considers the meaning a person ascribes to a phenomenon. Further, the ongoing interplay between the areas proposed in Figure 1 illustrates the complexity of the person-environment relationship, and thus the importance of considering several aspects when investigating human perceptions and contexts.

![Figure 1: Overview of the Person-Environment Relationship (based on Lazarus, 2006; Moos, 2002).](image)

**Understanding the ward atmosphere in psychiatric care**

**On the notion of ward atmosphere**

Several concepts have been used in the literature in order to describe the environment in which psychiatric care of patients occurs. A commonly used term for this purpose is the ward atmosphere (Beazley & Gudjonsson, 2011; Brunt, 2008; Johansson & Eklund, 2004). Other closely related concepts commonly used in psychiatric care are treatment environment (Burti, Andreone & Mazzi, 2004; Hawthorne, Green, Folsom & Lohr, 2009; Røssberg, Melle, Opjordsmoen & Friis, 2008), treatment climate (Timko & Moos, 1998), treat-
ment milieu (Pedersen & Karterud, 2007), psychosocial environment (Brunt & Hansson, 2002), and health-care environment (Johansson, Skärsäter & Danielsson, 2006). In the present thesis ward atmosphere will be used since it seems to be the most widely used concept for in-patient environments.

The ward atmosphere has been described as the “personality” of a setting (Moos, 1997), and is supposed to mark its tone or mode (Edvardsson, 2005). The importance of the environment, including the ward atmosphere, is highlighted in numerous documents. It is, for example, part of a definition of mental health promotion (Knapp, McDaid, Mossialos & Thornicroft, 2007), and is included in Principle 13 of the rights and conditions in mental health facilities (WHO, 2005). How these environmental aspects should be understood or defined is, however, not clear. A definition of the concept is also complicated by the fact that it may be difficult to differentiate between factors which only casually contribute to the ward atmosphere and those that are essential in defining the ward atmosphere.

Moreover, despite the rich amount of research in this area, only a few authors have tried to define or conceptualize the ward atmosphere. Edvardsson (2005) suggested that the ward atmosphere could be understood by two interacting dimensions: the physical environment, and people’s doing and way of being in the environment. This description may address some important aspects of the ward atmosphere, but “people’s doing and way of being” may be regarded a broad and vague expression. Melle et al. (1996) defined the ward atmosphere as: “the final common pathway of certain treatment and setting characteristics, including the amount of individual support and care, and the number of patients in the ward” (p. 722). As proposed in this definition, the treatment and the setting are two important ingredients of the ward atmosphere. Setting characteristics also constitute a general term, however, which thus lead to a broad definition. Those authors also highlight the importance of support and care, but the term “amount” stresses the quantities of support and care in the ward atmosphere and the definitions do not acknowledge the quality of such actions. Furthermore, although patients probably play an important role in shaping of the ward atmosphere, it is questionable whether the actual number of patients is essential for the ward atmosphere. Moreover, this definition does not include the roles and behaviours of staff which may form an important aspect when trying to understand and define the ward atmosphere.
Another way of clarifying what constitutes the ward atmosphere may be to include empirical descriptions from patients and staff. When asked about characteristics of the ward atmosphere, interpersonal relationships seem to be a vital aspect, as understood by both patients and staff (Borge & Fagermoen, 2008; Brunt & Rask, 2007; Daremo & Haglund, 2008; Thibeault, Trudeau, d’Entremont & Brown, 2010). Other key messages of such studies are that the ward atmosphere may include patient activities (Brunt & Rask, 2007; Daremo & Haglund, 2008; Thibeault et al., 2010), participation, engagement and support (Daremo & Haglund, 2008), and patients’ well-being and feeling of safety (Borge & Fagermoen, 2008; Brunt & Rask, 2007). Moreover, several studies also emphasize the physical environment (Borge & Fagermoen, 2008; Brunt & Rask, 2007; Daremo & Haglund, 2008), and the organization and culture of the ward (Borge & Fagermoen, 2008; Brunt & Rask, 2007; Daremo & Haglund, 2008). The staff has also been highlighted as the major contributors to the ward atmosphere, in terms of staff characteristics, professionalism, and their attitudes and values (Borge & Fagermoen, 2008; Brunt & Rask, 2007; Daremo & Haglund, 2008).

The above descriptions of staff’s and patients’ understanding of the ward atmosphere are in many ways similar to the description of the ward atmosphere given by Moos (1997). He operationalized the ward atmosphere in terms of three general dimensions with ten underlying factors: the Relationships dimension (Involvement, Support and Spontaneity), the Personal Growth dimension (Autonomy, Practical Orientation, Personal Problem Orientation and Anger and Aggression), and the System Maintenance dimension (Order and Organization, Program Clarity and Staff Control). Moreover, Moos (1997) also included the staff’s attitudes in his understanding of the ward atmosphere. The physical environment was not addressed in his description however, but may need to be included in a definition. Moreover, interpersonal relationships may not be restricted to only one dimension of the ward atmosphere, but also be embedded in the care and treatment, as well as in the realization of the ward organization and rules. Moos (1997) also emphasizes the characteristics of the patients, mostly in terms of angry and aggressive behavior. However, it could be questioned whether patient characteristics are part of what constitutes the ward atmosphere or casually contributory factors.

The conceptual basis for understanding the ward atmosphere in the present thesis is summarized in Figure 2. The ward atmosphere is seen as a dynamic phenomenon comprising the following core aspects: The Relationships, the
terventions (treatment, nursing, caring, therapy), the Organization and Culture of the ward (rules, routine, control, norms, ideologies, values), and the Physical environment. These core aspects are interwoven and interactive aspects of the ward atmosphere, and include both patients, staff and significant others. Further, the Relationship aspect permeates all of the ward atmosphere aspects.

The ward atmosphere in psychiatric care
Research in the area of ward atmosphere in psychiatric care has been conducted for over four decades. Consequently, there is a voluminous body of research results available, thus illustrating the importance of the ward atmosphere. This means that the present literature review must be restricted, and this review is delimited to a short description of the research conducted in the recent decade.

Figure 2: Conceptual summary of the ward atmosphere
The ward atmosphere and the patients' situation

An important aspect of the ward atmosphere in psychiatric care is its potential influence on the patients and their situation. Several studies have been conducted of the relationship between the ward atmosphere and different care-related aspects. Several studies have found a relationship between aspects of the ward atmosphere and patient satisfaction with care (Eklund & Hansson, 2001b; Jörgensen, Rømme & Rundmo, 2009; Middelboe, Schjødt, Byrsting & Gjerris, 2001; Rossberg & Friis, 2004; Rossberg, Melle, Opjordsmoen & Friis, 2006), and patient motivation in psychiatric care (Beazley & Gudjonsson, 2011; Eklund & Hansson, 2001b). Moreover, the structure, organization and the rules embedded in the ward atmosphere, has been found to be of importance for the recovery, reduction in conflicts and reduced containment rates of patients in psychiatric care (Borge & Fagermoen, 2008; Bowers, 2009). The ward atmosphere has also been found to be related to the helping alliance in psychiatric in-patient care (Johansson & Eklund, 2004). Generally, no associations between patient characteristics and the ward atmosphere have been established (Jansson & Eklund, 2002b; Pedersen & Karterud, 2007), but inner traits and symptoms, in terms of self-control, paranoid symptoms, and cognitive ability, were associated with the ward atmosphere among patients with psychosis in a psychiatric rehabilitation unit (Jansson & Eklund, 2002a).

Setting and patient-staff differences

Research in the field of the ward atmosphere also includes comparative studies of different psychiatric wards and settings (Brunt & Hansson, 2002; Brunt, 2008; Jørgensen et al., 2009). For example, an all-male ward (Thomas, Hutton, Allen & Olajide, 2009), locked psychiatric wards (Middelboe et al., 2001), and hospital based wards (Hawthorne et al., 2009) had higher levels of angry and aggressive behavior. These studies suggest that the ward atmosphere differs, and/or is perceived differently in various types of settings. Several studies have also investigated the different perspectives of patients and staff concerning the ward atmosphere (Brunt & Rask, 2005; Burti et al., 2004). Since these groups are in the ward for different reasons, it is assumed that they disagree in their perceptions (Schjødt, Middelboe, Mortensen & Gjerris, 2003). Overall, the staff tend to score higher regarding several of the ward atmosphere factors (Alexander, 2006; Jansson & Eklund, 2002b; Rossberg & Friis, 2004; Schjødt et al., 2003; Viken, Lønning, Røstad, Korsmo & Lorentzen, 2008), and lower regarding the factor measuring staff control (Jansson &
Eklund, 2002b; Røssberg & Friis, 2004; Schjødt et al., 2003). Differences between patients and staff concerning the experience of the ward atmosphere were also found in an interview study in an acute psychiatric in-patient ward. Both groups experienced the ward atmosphere as imprisoned, but for different reasons, as illustrated by the patients feeling bored and inactive and the staff feeling pressure and chaos (Shatell, Andes & Thomas, 2008).

The physical milieu and the ward atmosphere

Several studies have investigated ward atmosphere changes as outcomes of deliberate or natural alterations in units and in the care. Improvements in the ward atmosphere have been shown after a three week nursing staff training based on milieu therapy (Nesset, Røssberg, Almvik & Friis, 2009), and after distributing severely disturbed patients across the investigated wards, instead of grouping them together on one ward (Gebhardt & Steinert, 1999). Research has also found that interventions aimed at improving the physical environment, safety, clarity of goals and rules, and communication (Mistral, Hall & McKee, 2002), and after the introduction of a new work rehabilitation model (Eklund & Hansson, 2001a) led to a few changes in the ward atmosphere. Moreover, a crisis period (the move of psychotic and severely disturbed patients to an open psychiatric ward) was found to be associated with a decrease in patients’ satisfaction and a decrease in scores on several aspects of the ward atmosphere (Gjerden & Moen, 2001).

Although not addressed in the present thesis, the physical aspects of the ward atmosphere are of importance. For example, in a study of seclusion areas in two psychiatric wards, Vaaler, Morken and Linaker (2005) changed the interior design of one of the investigated seclusion areas and made it more pleasant and home-like. The results showed no differences in terms of patient symptoms, violence and function, between the two seclusion areas. The authors found no justification for the use of a traditional stimulus-reducing interior and suggested that such a design should be replaced by a more home-like design. In an interview study, patients experienced the ward atmosphere as imprisoned and suffocating due to lack of space and not being able to go outside for fresh air. In the same study, the locked and glassed-in nurses’ station was experienced as a hinder for nurse-patient interaction, as expressed by the nurses (Shatell et al., 2008).
The ward atmosphere and the nursing staff’s situation

Descriptive and comparative studies of the ward atmosphere often include staff perceptions. Recent studies that specifically investigate the relationship between the ward atmosphere and the staff’s work situation are, however, rare. One study found that a high score on the ward atmosphere factor Order and Organization was significantly associated with reduced burnout among nursing staff in acute psychiatric in-patient wards (Bowers, Allan et al., 2009). Another study found few significant associations between the staff’s perceptions of the ward atmosphere and satisfaction with the ward, among staff members in psychiatric in-patient care. Those authors discussed that the ward atmosphere might be more important for patient satisfaction than for staff satisfaction (Røssberg & Friis, 2004). In the study where a mixed-sex ward was changed into an all-male ward, the change was found to be related to an increase in stress, and a reduction in job satisfaction among the staff (Thomas, et al., 2009). These few and partly inconsistent results illustrate the paucity of research that specifically investigates how the perceived ward atmosphere may be related to the nursing staff’s situation.

Measuring the ward atmosphere

In research that has measured the ward atmosphere, the Ward Atmosphere Scale, WAS, (Moos, 1997) must be regarded as the golden standard instrument. It has been widely used, and no real alternative seems to exist. The WAS was developed in the late 1960s and the initial development was based on several sources, including popular and professional books and patient and staff interviews. As mentioned above, the WAS is composed of three higher dimensions and ten subscales; the Relationship dimension (Involvement, Support and Spontaneity), the Personal Growth dimension (Autonomy, Practical Orientation, Personal Problem Orientation and Anger and Aggression) and the System Maintenance dimension (Order and Organization, Program Clarity and Staff Control). The initial psychometric testing of the WAS resulted in an acceptable internal consistency with averaged Cronbach’s alpha values of 0.66 for patients and 0.71 for staff (Moos, 1997). In subsequent research, however, few of the subscales have reached Cronbach’s alpha values above 0.7 (Friis, 1986). Similarly, in more recent studies researchers have not found acceptable internal consistency for several of the WAS subscales (Røssberg & Friis, 2003a, 2003b; Sørlie, Parniakov, Rezvy & Ponomarev, 2010). Furthermore, the WAS was developed more than four decades ago and concern has been
raised regarding items being outdated (Nesset et al., 2009; Røssberg & Friis, 2003a, 2003b; Sørlie et al., 2010). It has also been shown, by using factor analysis, that the WAS comprises fewer than 10 factors (Alden, 1978; Denny, Costello & Cochran, 1984; Moos, 1997), and critiques has been raised against the length of the WAS (Middelboe et al., 2001). As a consequence, the WAS subscales have been revised and used in different ways (Beazley & Gudjonsson, 2011; Pedersen & Karterud, 2007; Sørlie et al., 2010). This critique illustrates the need for a revision of the WAS and the present thesis included a psychometric evaluation of a revised Swedish version. A thoroughly modified Norwegian version of the WAS has been tested with some promising results (Røssberg & Friis, 2003a; 2003b) and therefore served as a basis for a revised Swedish version.

Another important aspect concerns the difficulties in being able to measure the phenomenon of the ward atmosphere with an instrument. Research in the nursing field is often concerned with more subjective aspects and may be considered difficult to measure (Streiner & Norman, 2008). When trying to assess such aspects, the instrument thus needs to be valid and reliable (Carter & Porter, 2000; Streiner & Norman, 2008). There are several different approaches and concepts used concerning the validity and reliability of an instrument. One important aspect refers to the importance of having a clear definition of the concept that is being measured (Carter & Porter, 2000) and refers to the validity of the instrument. Face and content validity are terms that describe if a scale looks reasonable and assesses the desired qualities (Streiner & Norman, 2008). Face validity is described as a simple form that measures “the face of it”. The content validity includes the extent to which an instrument measures what it is meant to measure and uses some kind of experts to judge the content of the instrument (Carter & Porter, 2000; Streiner & Norman, 2008). This type of validity is suggested to be a minimum necessity for an instrument (Streiner & Norman, 2008). Construct validity is another commonly used term to assess the validity of an instrument and refers to the degree of consistency with which the instrument measures the phenomenon; it also refers to the link between the instrument and the underlying theory (Carter & Porter, 2000). In order for an instrument to be valid, it also needs to be reliable. The internal consistency involves the extent to which an instrument measures the variable under investigation. The most widely used method for this is the Cronbach’s alpha (Carter & Porter, 2000). The Cronbach’s alpha is calculated after one single administration of the instrument and will therefore not
acknowledge the variation in time or between different persons. The test-retest is therefore commonly used for stability measures and is based on two or more administrations (Streiner & Norman, 2008).

The psychiatric nursing staff’s work situation

As mentioned previously, the psychiatric care system has changed radically in the past decades, thus leading to several concerns regarding the work situation for nursing staff (Cleary, 2004; WHO, 2007). The importance of healthy workplaces for the well-being of the staff has long been recognized (National Board of Health and Welfare, 2003; WHO, 2007). In order to be able to understand the work situation of the nursing staff, several aspects need to be considered. Two areas that are addressed in the present thesis are the psychosocial work environment and the nursing staff’s perceived stress.

The psychosocial work environment

The phenomenon of the psychosocial work environment generally includes a multitude of factors such as organizational climate and culture, work demands, work control, and leadership and co-worker support. Two of the most commonly used models in work environment research are Karasek’s Job Strain model (Karasek & Theorell, 1990) and Siegrist’s Effort-Reward Imbalance Model (Siegrist, 1996). The job strain model suggests that stress and different health problems may be the result of high levels of psychological demands or pressure combined with a low level of control or decision latitude (Karasek & Theorell, 1990). The effort-reward imbalance model focuses on the effort individuals put into their work and the rewards that they receive. Stress and negative health outcomes may be considered the results of an imbalance between high effort levels and insufficient rewards (Siegrist, 1996). Other researchers have used these models as a base and then added other aspects and dimensions, such as the interaction with patients in health care (Lavoie-Tremblay et al., 2005). In general, the phenomenon of psychosocial work environment could be described as a compound system including the work, the workers and the environment (Lindström et al., 1995).

The importance of the work environment for the well-being of the staff has long been recognized (Karasek & Theorell, 1990). The work environment in psychiatric care has been found to differ from that of other general care settings (Roche & Duffield, 2010). Working in psychiatric care has also been
found to be associated with a higher risk for sickness absence (Eriksen, Bruusgaard & Knardahel, 2003), and in interview studies, the psychiatric work environment has been described as complex and characterized by high pressure levels (Cleary, 2004; Currid, 2009). In several studies, an association between the work environment (Ward & Cowman, 2007), role clarity (Gulliver, Towell & Peck, 2003; Spear, Wood, Chawla, Devis & Nelson, 2004), empowerment (Laschinger, Finegan, Shamian & Wilk, 2001; Lautizi, Laschinger & Ravazollo, 2009) and job satisfaction has been found. Thus, when seeking to understand the nursing staff’s work situation in psychiatric in-patient care, the psychosocial work environment seems to be a vital aspect to consider.

The stress process
The models posed by Karasek and Theorell (1990) and Siegrist (1996) also address the importance of stress. This implies that the nursing staff’s stress levels may be influenced by the work environment, and need to be addressed when studying the working conditions. The literature in the area of stress is voluminous and the present thesis only addresses certain issues concerning stress. The term stress has been used to refer to at least three different components of the stress process; the stimuli, the stress response and the transactional model (Lazarus, 2006; Lyon, 2000). The stimuli approach focuses on psychological experiences and treats life changes or “life-events” as the stressor to which a person responds. An overall assumption is that too many life changes increase an individual’s vulnerability to illness (Lyon, 2000). Stress has also been described by Selye (1956) as an arousal in response to something that needs to be warded off. This focus on the response emphasizes the physiological mobilization of activity Selye (1956). Over the years, many transactional or relational models have emphasized the interaction between the environment and the individual, suggesting that stress is shaped by the balance of perceived demands that the individual is facing, and the resources perceived as being necessary to meet those demands, and when the individual’s available resources are perceived as being insufficient for meeting the demands, the individual experiences stress (Karasek & Theorell, 1990; Lazarus & Folkman, 1984; Lazarus, 2006).

Another form of stress that needs to be acknowledged is the nursing staff’s stress of conscience. Glasberg et al. (2006) defined stress of conscience as: “a product of the frequency of the stressful situation and of the perceived degree of troubled conscience as rated by healthcare personnel themselves” (p. 636).
The background for constructing this concept was the experiences of troubled conscience that emerged from interviews with health-care staff in previous qualitative nursing studies (Glasberg, 2007). A person’s conscience has been described in different ways and may be summarized as an inner dialogue and guide that navigates people between right and wrong (Hughes & Baldwin, 2006; Juthberg, Eriksson, Norberg & Sundin, 2010). Moral distress (Austin, Kagan, Rankel & Bergum, 2008; Corley, Elswick, Gorman & Clor, 2001; Kälvemark, Höglund, Hansson, Westerholm & Arnetz, 2004) and moral stress (Lützén, Cronqvist, Magnusson & Andersson, 2003) are other similar concepts and they all describe a type of stress that is caused by ethical and moral concerns. In psychiatric care, the nursing staff’s feelings of inadequacy in the care have been related to stress of conscience (Dahlqvist, Söderberg & Norberg, 2009). Moral sensitivity is related to stress of conscience (Glasberg, 2007) and has been described as involving an attention or awareness to moral conflicts, values and implication. Moreover, moral sensitivity also includes a person’s insight into the patient’s situation and has the function of a guide for ethical decision making (Lützén & Nordin, 1993).

Theories regarding stress often emphasize the importance of an individual’s resources and coping strategies (Lazarus, 2006). Coping strategies can be understood as a response or strategy used to deal with a perceived threat (Lazarus, 2006). Mastery is seen as a type of coping mechanism and denotes the control people experience they have over situations and factors that affect their lives and has been defined as "the extent to which one regards one’s life-chances as being under one’s own control in contrast to being fatalistically ruled" (Pearlin & Schooler, 1978, p. 5).

Research addressing stress among nursing staff in psychiatric care is inconsistent. Several studies indicate that the work in psychiatric care is stressful (Currid, 2008; 2009; Happel, Martin & Pinikahana, 2003; Taylor & Barling, 2004; Sørgaard, Ryan & Dawson, 2010). Other studies, however, suggest that the nursing staff deals well with demands at work (Gibb, Cameron, Hamilton, Murphy & Naji, 2010), and that the stress levels are not serious (Bowers, Allan et al., 2009; Richards et al., 2006; Sørgaard, Ryan, Hill & Dawson, 2007). A few comparative studies also indicate that psychiatric in-patient care may be more stressful than forensic care (Happel et al., 2003), but less stressful than general nursing care (Muscroft & Hicks, 1998). In comparative studies among nursing staff, one study found that the nursing staff in in-patient care experienced more burnout than community staff (Gibb et al., 2010), but another
study showed the opposite, that community nursing staff had higher levels of burnout than in-patient staff (Prosser et al., 1996). A third study indicated no differences in burnout between community and in-patient staff (Sørgaard et al., 2007). Overall, the inconsistency between studies makes it difficult to draw any conclusions and this concern has also been reported in a literature review of stress in psychiatric in-patient care (Richards et al., 2006). Few studies have focused on differences in the perceptions of stress between nurses and nurse assistants in psychiatric care, but there are some indications that there are few differences between these staff groups (Jenkins & Elliot, 2004; Sørgaard et al., 2010).

High levels of stress increase the risk for negative health outcomes (Karasek & Theorell, 1990; Siegrist, 1996). It is thus vital to gain more knowledge about perceived stress among nursing staff in psychiatric in-patient care, as a basis for developing possible preventive measures.

The rationale of the thesis

As previously mentioned, psychiatric nursing is not based solely on one perspective, and incorporates several theoretical perspectives (Bowers, Allan et al., 2009; Norman & Ryrie, 2004). The present thesis is also based on several different theoretical perspectives, which include nursing, psychology, ecology and work life theory. This broad foundation has been essential for the understanding of how the areas investigated in the present thesis might be related. Previous research that has studied associations between these areas in psychiatric care has shown that negative influences from the psychosocial work environment are related to stress among the nursing staff (Currid, 2009; Gibb et al., 2010; Jenkins & Elliot, 2004; Lasalvia et al., 2009). Moreover, a detrimental work environment in psychiatric care has been found to create an unethical climate (Lützén & Schreiber, 1998), leading to stress (Hummelvoll & Severinsson, 2001), a troubled conscience (Dahlqvist et al., 2009), and stress of conscience (Deadly & MacCarthy, 2010; Ohnishi et al., 2010). Thus, it seems important to include psychosocial work environmental aspects in order to understand the nursing staff’s working conditions. As previously mentioned, there is a scarcity of research that investigates the relationship between the ward atmosphere and the nursing staff’s situation in psychiatric care. However, the nursing staff’s intense relationships with patients (Lasalvia et al., 2009), and patient aggression and violence (Currid, 2008; 2009; Taylor & Barling,
2004) have been found to be perceived as stressors. Moreover, the moral sensitivity factor of moral burden has been shown to be related to stress of conscience in psychiatric care (Lützén, Blom, Ewalds-Kvist & Winch, 2010), and mastery has been shown to protect against stress among carers of persons with Alzheimer's disease (Mausbach et al., 2006). By focusing on both the environment and individual factors, the understanding of the nursing staff’s work situation may be broadened.
AIMS

This thesis focuses on the nursing staff working in psychiatric in-patient care. The overall aim was to investigate perceptions of the ward atmosphere, the psychosocial work environment and stress, and how these factors were related to each other.

The specific objectives of the four included papers were:

**Paper I** To test the psychometric properties of a revised Swedish version of the Ward Atmosphere Scale in terms of internal consistency, content and construct validity, and usability.

**Paper II** To investigate how the ward atmosphere was related to the psychosocial work environment and possible differences between registered nurses and nurse assistants regarding perceptions of those phenomena.

**Paper III** To investigate the nursing staff’s perceptions of stress and how the ward atmosphere, the psychosocial work environment, and nursing staff characteristics were related to perceived stress.

**Paper IV** To investigate how environmental and individual factors were related to stress of conscience among nursing staff in psychiatric in-patient care.
METHODS

The present thesis comprises four papers that were conducted by using quantitative research methods. The design was a cross-sectional survey including patients (Paper I) and nursing staff (Papers I-IV) in general acute psychiatric in-patient care. An overview of the setting, sample, data collection and data analysis of the four papers are shown in Figure 3.

Settings

The settings for all papers were chosen according to the thesis focus on psychiatric in-patient care. All included wards were general acute in-patient wards, with one exception in Paper I, which was also based on a rehabilitation unit for patients with psychosis. There was a total of four wards included in Paper I and twelve in Papers II-IV, and all were located in southern Sweden. The main focus on these wards was short-term treatment with a length of stay generally varying between two and five weeks, although longer care periods were not uncommon. The wards were mostly locked, and the number of beds on each ward was officially 10 to 16, but it was common that a ward had to admit more patients. The main staff groups were registered nurses, nurse assistants, psychiatrists and ward managers. Ward managers and psychiatrists were not included in the present thesis.
Figure 3: Overview of the four Papers included in the thesis
Selection procedure and data collection

Approval from the clinical directors and ward managers was obtained (Papers I-IV). The inclusion criteria for participating in the studies were sufficient knowledge of the Swedish language and a minimum of two weeks admittance for the patients (Paper I). The inclusion criteria for the staff were working daytime and having worked at the ward for at least two months (Papers I-IV). An information meeting was held at each ward, and immediately after the meeting the nursing staff received the questionnaires along with written information about the study, an informed consent form and a self-addressed return envelope. Some of the nursing staff were not present at this meeting and received the questionnaire with information, informed consent form, and return envelope, from the ward manager (Papers I-IV). The same information was given to the patients but over a period of seven months (Paper I). For Paper I, the questionnaires were collected by the researcher and for Papers II-IV they were posted to the researcher in sealed envelopes. Several reminders were given to the nursing staff (Papers I-IV) and the data collection period lasted for seven months for Paper I and four months for Papers II-IV. The questionnaires were given to 59 patients and 58 nursing staff for Paper I, and 179 nursing staff for Papers II-IV.

Sample

Paper I
The sample in Paper I comprised registered nurses, nurse assistants and patients. The questionnaires were returned by a total of 34 nursing staff (response rate = 58.6%) and 31 patients (response rate = 52.5%). The mean age was 43 years for the nursing staff and 44 years for the patients. More women than men participated (75% of the nursing staff and 55% of the patients). The nursing staff sample consisted of both registered nurses (15) and nurse assistants (17) (two missing values) and most of them were permanently employed (89%). The mean experience of working was 8 years in the current ward and 16 years in psychiatric care. The patient sample consisted of mostly self-referred patients (87%) and these had a mean length of six weeks admission on the ward.
Papers II-IV
The questionnaires were returned by a total of 38 registered nurses (response rate = 54.3%) and 55 nurse assistants (response rate = 50.5%), none of whom were included in Paper I. The majority of the participants were females (78%) and were permanently employed at the ward (86%). The mean age of the participants was 48 years with a significantly higher mean age of nurse assistants (50 years) compared to the nurses (45 years). The nurse assistants also had a significantly longer mean experience of working in psychiatry (20 years), compared to the nurses (15 years). The average length of employment at the actual ward for the total sample was nine years.

Instruments
Ward Atmosphere Scale
The Ward Atmosphere Scale (WAS) was developed by Moos and Houts (Moos, 1974; 1997) in the late 1960s to measure different aspects of the ward atmosphere. The original WAS is a self-report questionnaire, consisting of 100 statements about the ward that form ten subscales. Each statement is answered in terms of true or false. The WAS was recently revised and tested in a Norwegian sample by Røssberg and Friis (2003a, 2003b). The authors tried to preserve it as a generic instrument for use in a wide variety of wards and the revised version comprises 80 items and 11 subscales (see Table 1). The changes in this revised version mostly concerned the subscales of Anger and Aggression and Spontaneity. One item from the Anger and Aggression subscale and two items from the Spontaneity subscale were removed and set to form a new subscale named: Staff Attitude to Expressed Feelings. Two other items from the Anger and Aggression subscale were removed to obtain a better Cronbach’s alpha value. This revised subscale was named Angry and Aggressive Behavior. The new revised subscale of Spontaneity was named Spontaneous Behavior and to improve the Cronbach’s alpha another three items were removed. No changes were made in the subscales of Involvement, Support, and Order and Organization. In the remaining five subscales items were removed that exhibited a low Corrected Item Total Subscale Correlation (CITC), which improved the Cronbach’s alpha, however, the alpha coefficients were still barely acceptable (0.54-0.72) (Røssberg & Friis, 2003a; 2003b).
In Paper I a Swedish version of the revised WAS was used and tested following
the suggestions of Røssberg and Friis (2003a; 2003b). This Swedish version
comprises 83 items and 11 subscales (Table 1), which are answered on a four-
point scale, ranging from Totally disagree to Totally agree. The most recent
English version of the WAS (Moos, 1997) was used for the translation into
Swedish. The first translation from English to Swedish was made by the au-
thors and the retranslation back to English by a person with English as his
mother tongue. Six of the WAS-subscases (Involvement, Practical Orientation,
Personal Problem Orientation, Angry and Aggressive Behavior, Order and Or-
ganization, and Program Clarity) were also used in Papers II-IV. The content
of the eleven revised subscales are given in Table 1.

QPSNordic 34+
The QPSNordic 34+, comprising 37 questions, is a short version of the Gener-
al Nordic Questionnaire for Psychological and Social Factors at Work (QPS
Nordic) and was used in Papers II-IV. The respondents rate their answers on a
two-point scale, ranging from Very seldom or never (1) to Very often or al-
The psychometric properties of the QPSNordic 34+ do not, however, seem to
have been previously tested. Sets of items corresponding to established subs-
calces and areas of the full QPSNordic were thus tested for internal consistency,
guided by the criterion of a Cronbach’s alpha value of > 0.70. This procedure
identified five subscales: Empowering Leadership (2 items; Cronbach’s alpha =
0.85), Role Clarity (2 items; Cronbach’s alpha = 0.79), Control at Work (4
items; Cronbach’s alpha = 0.72), Support from Superiors (2 items; Cronbach’s
alpha = 0.8), and Organizational Climate (6 items; Cronbach’s alpha = 0.77).
These subscales were used in Papers II-IV.

Perceived Stress Scale
The PSS was developed by Cohen, Kamarck & Mermelstein(1983) to measure
how different life situations create stress and the degree to which a person ex-
periences life as unpredictable, strenuous and uncontrolled. The instrument is
frequently used and has been translated into several languages for example,
Swedish (Eskin & Parr, 1996). The version used for Papers III-IV consists of
14 questions and the respondents rate their answers on a five-point scale, from
Never (0) to Very often (4), with higher scores (maximum score = 56) indicat-
ing higher levels of perceived stress. The instrument has good psychometric properties (Cohen et al., 1983; Cohen & Williamson, 1988; Eskin & Parr, 1996) and has been used in several studies and various settings (González Ramírez & Landero Hernández, 2007; Leung, Lam, & Chan, 2010; Testad, Mikkelsen, Ballard & Aaarsland, 2010). In the present thesis, the Cronbach’s alpha for the PSS was 0.83 (Papers III-IV).

Table 1: Overview of the 11 subscales of the revised Ward Atmosphere Scale

<table>
<thead>
<tr>
<th>Revised WAS subscales</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>How active and energetic patients are in the ward</td>
</tr>
<tr>
<td>Support</td>
<td>How much patients help and support each other and how supportive the staff is towards the patients</td>
</tr>
<tr>
<td>Spontaneous Behavior</td>
<td>How much the program encourages the open expression of feelings by patients and staff</td>
</tr>
<tr>
<td>Autonomy</td>
<td>How self-sufficient and independent patients are in making their own decisions</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>How much patients learn practical skills and are prepared for discharge from the ward</td>
</tr>
<tr>
<td>Personal Problem</td>
<td>How much patients seek to understand their feelings and personal problems</td>
</tr>
<tr>
<td>Orientation</td>
<td>How much patients argue with each other and staff, become openly angry, and display other aggressive behavior</td>
</tr>
<tr>
<td>Angry and Aggressive</td>
<td>How much patients argue with each other and staff, become openly angry, and display other aggressive behavior</td>
</tr>
<tr>
<td>Behavior</td>
<td>How much patients argue with each other and staff, become openly angry, and display other aggressive behavior</td>
</tr>
<tr>
<td>Order and Organization</td>
<td>How important order and organization are in the ward</td>
</tr>
<tr>
<td>Program Clarity</td>
<td>The extent to which patients know what to expect in their daily routine and the explicitness of ward rules and procedures</td>
</tr>
<tr>
<td>Staff Control</td>
<td>The extent to which the staff use measures to keep patients under necessary control</td>
</tr>
<tr>
<td>Staff Attitude to Expressed Feelings</td>
<td>To what extent staff encourage patients to openly express their feelings</td>
</tr>
</tbody>
</table>
Stress of Conscience Questionnaire

The Stress of Conscience Questionnaire (SCQ) was used in Paper IV to target stress associated with troubled conscience (Glasberg et al., 2006). The SCQ consists of nine items, where each item comprises an A and a B part. In part A, the participants rate how often they have experienced a certain situation at the workplace and rate it on a six-point scale ranging from Never (0) to Everyday (5). In part B a 100 mm visual analogue scale (VAS) ranging from “No, not at all” (0) to “Yes, it gives me a very troubled conscience (5), is used for each of the nine items. The B part assesses the intensity of the troubled conscience caused by the situations tapped in part A. By multiplying the scores from part A with the scores from part B, an index of each item is created. Higher scores represent more Stress of Conscience. In Paper IV, a total Index of all nine items was used (Maximum score = 225), as well as two aggregated subscales, “Internal Demands” and “External Demands and Restrictions”, which have been found to have good internal consistency (Glasberg et al., 2006).

Moral Sensitivity Questionnaire

The revised Moral Sensitivity Questionnaire (MSQ) was used in Paper IV to assess an individual’s awareness and ability to sense the moral nature of a situation and the vulnerability of others. The revised MSQ comprises nine statements and the respondents answer on a six-point scale ranging from Total disagreement (1) to Total agreement (6). A recent study, using principal component analysis, found three factors: Sense of Moral burden, Moral Strength and Moral Responsibility (Lützén, Dahlqvist, Eriksson & Norberg, 2006). In Paper IV “Moral Responsibility”, consisting of two items, was analyzed as two single items, due to poor internal consistency (Cronbach’s alpha = 0.34).

Mastery

The Mastery scale developed by Pearlin and Schooler (1978), assesses the respondent’s feeling of having control over his or her life. The scale comprises seven statements, which are to be answered on a four-point scale ranging from Strongly agree (1) to Strongly disagree (4), and was used as an total index in Paper IV. In a recent study, the psychometric properties of a Swedish version have shown satisfactory internal consistency (Eklund, Erlandsson & Hagell, in press).
Patient and Nursing staff characteristics
In all four papers, background questions for collecting information about characteristics of the participants were used. The questions to the nursing staff included age, gender, occupation, type of employment, and work experience (Papers I-IV), and the patients were asked about, age, gender, type and length of current admission, and the existence and length of previous admissions.

Good Milieu Index
The Good Milieu Index (GMI) reflects a respondents’ general satisfaction with the ward. In the present thesis the GMI was used to test the construct validity of the revised Ward Atmosphere Scale (Paper I). Friis (1986) created the GMI from five general satisfaction items developed by Moos (1974), which are rated on a five-point scale (from very much to not at all).

Content validity and usability questionnaire
In order to investigate the content validity and usability of the revised WAS, seven questions targeting these areas were used in Paper I. The respondents gave their answers on a five-point scale and were also provided with the opportunity to give comments and suggestions.

Data analysis
In the present thesis, nonparametric statistics were used for analysis of the data. Cronbach’s alpha was used in order to assess the internal consistency of scales and subscales in the present thesis (Papers I-IV). For the ward atmosphere subscales, a Cronbach’s alpha of 0.70 or higher was considered satisfactory, and 0.50 was regarded the lower limit for considering the alpha value as acceptable (Rossberg & Friis, 2003a; 2003b). Descriptive statistics were performed in order to assess the content validity and usability of the WAS (Paper I), characteristics of the participants and response distributions of the subscales (Papers I-IV). The Mann-Whitney U-test was used for detecting differences between groups (Papers II-IV), and Spearman rank correlations for analyzing relationships between variables such as, the construct validity of the WAS (Paper I) and for identifying which variables to include in the multivariate analysis (Papers II-IV). To interpret the correlations, the limits proposed by Cohen (1988) for estimating sizes of relationships (0.1-0.3 = small; 0.3-0.5 = moderate; > 0.5 = large) were used. For the multivariate analysis, which
were logistic regression analyses, a high and a low group was created by dichotomizing the total group according to a median cut on each variable. A forward stepwise conditional model was used to calculate the relationships between independent and dependent variables (Papers II-IV). A p-value of < 0.1 was used for the selection of variables to include in multivariate analyses. In all other statistical tests, p < 0.05 was considered significant. The data analyses were performed by the statistical software package SPSS versions 16.0 (Paper I) and version 17.0 (Papers II-IV).

**Ethical considerations**

The studies were performed in accordance with the law of Ethical Review of Research Involving Humans in Sweden (SFS, 2003:460). According to that law, no approval from an ethical review board is needed if the principle of informed consent is applied and the study does not involve an intervention or ask for sensitive questions. Therefore, no application was made regarding Paper I. The data collection for Papers II-IV was more comprehensive, and an application was sent in and was approved by the Regional Ethical Review Board (dnr 380/2008). For all papers included in this thesis, the four ethical principles in research of information, confidentiality, informed consent and applicability (HSFR, 1999) were applied.

A major consideration in research is the respect for the individual’s autonomy, especially regarding vulnerable groups, such as patients in psychiatric inpatient care (Streiner & Norman, 2008). The present thesis included patients (Paper I) and precautions were taken in order to guarantee and respect their anonymity. In order to avoid and prevent any experienced pressure or subtle coercion towards the patient, both the oral and written information contained a guarantee that declining to participate would not affect their care and treatment at the ward. Information about anonymity and the study was also given to the staff in all four papers and all participants (both patients and staff) were informed about the freedom to withdraw from the study at any time and without any explanation. Although several measures were taken to inform all participants about the anonymity, confidentiality and freedom to withdraw, there is still a risk that some participants, or those who declined to participate, felt unsafe. Several of the participating nursing staff did not sign the consent form or the question about their age, which may indicate that they doubted that their anonymity could be preserved.
In order to obtain as many participants as possible, all nursing staff who completed and returned the questionnaire received a scratch card (Papers II-IV). This small reward may have motivated some of the nursing staff to participate; still, the response rates indicate that it was not decisive for participation. Several reminders were also made to the participants in all four papers. The balance of the need to obtain participants and the respect of their integrity had to be carefully considered in the present thesis. The reminders could therefore only be made at a general level and not be directed towards certain individuals. Regarding the questionnaires used in the present thesis, they did not involve questions of any sensitive or emotional nature. The potential harm of participating was therefore considered low.
RESULTS

The results of this thesis are summarized in three sections, which regard the revised Ward Atmosphere Scale, perceptions of the ward atmosphere, and the nursing staff’s work situations, stress, and sense of control.

The revised Ward Atmosphere Scale

In the present thesis a revised Swedish version of the Ward Atmosphere Scale (WAS) was used. The psychometric properties and usability of this scale was tested in Paper I and the reliability of the 11 subscales included in the revised WAS was also analyzed for the sample in Papers II-IV. Overall, the Cronbach’s alpha coefficients were low for most of the subscales in the staff sample in Papers II-IV, and the staff ratings generated higher alpha values than the patients in Paper I. The subscales of Autonomy and Spontaneous Behavior did not reach a Cronbach’s alpha > 0.5 (Papers I-IV). Six of the subscales (Involvement, Practical Orientation, Personal Problem Orientation, Angry and Aggressive Behavior, Order and Organization, Program Clarity) had acceptable to satisfactory internal consistency (Papers I-IV). In Paper I, three additional subscales reached acceptable alpha coefficients (Support, Staff Control, Staff Attitude to Expressed Feelings). The results of the Cronbach’s alpha in Papers I-IV are presented in Table 2.

In terms of the validity and usability data presented in Paper I, the results showed that the participants chose the middle alternatives to respond to the questions. The critique concerned the length and vagueness of the revised WAS, difficulties in understanding some of the items, and the lack of items addressing the physical milieu. A majority felt, however, that the revised WAS was rather easy to complete and understand and they found the length of the
scale as reasonable, considering the mean time it took to answer the questions (15.5 minutes for the staff, 18 minutes for the patients).

Table 2: Cronbach’s alpha for the 11 subscales (Papers I-IV)

<table>
<thead>
<tr>
<th>Ward atmosphere subscales</th>
<th>Cronbach’s alpha Paper I</th>
<th>Cronbach’s alpha Papers II-IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patients (n = 31)</td>
<td>Staff (n = 34)</td>
</tr>
<tr>
<td>Involvement</td>
<td>0.66</td>
<td>0.50</td>
</tr>
<tr>
<td>Support</td>
<td>0.55</td>
<td>0.68</td>
</tr>
<tr>
<td>Spontaneous Behavior</td>
<td>0.50</td>
<td>0.49</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.23</td>
<td>0.42</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>0.59</td>
<td>0.72</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>0.47</td>
<td>0.70</td>
</tr>
<tr>
<td>Angry and Aggressive Behavior</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td>Order and Organization</td>
<td>0.84</td>
<td>0.89</td>
</tr>
<tr>
<td>Program Clarity</td>
<td>0.60</td>
<td>0.77</td>
</tr>
<tr>
<td>Staff Control</td>
<td>0.65</td>
<td>0.72</td>
</tr>
<tr>
<td>Staff Attitude to Expressed Feelings</td>
<td>0.66</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Perceptions of the ward atmosphere

The results of the response distribution of the ward atmosphere subscales in Paper I were based on responses scored on a scale of 1-4 and in Papers II-IV of 0-3. The scores for Paper I were transformed to the 0-3 format and in this results section the response distributions presented for all papers are based on a score of 0-3. Table 3 shows the values for those scales that were used for both samples, that in Paper I and that in Papers II-IV.
The participants’ ratings were moderately high for most of the WAS subscales. Although no analyses of difference were made, visual inspection indicates that a somewhat higher mean score was found in Papers II-IV, for the subscale Personal Problem Orientation and in Paper I for the subscale Angry and Aggressive Behavior. The result of the Mann-Whitney U-test showed no significant ward atmosphere differences between registered nurses and nurse assistants, or between any groups based on the nursing staff characteristics (Papers II-IV).

The results of the logistic regression models (Papers II-IV) showed that each of the six investigated ward atmosphere subscales (Involvement, Practical Orientation, Personal Problem Orientation, Angry and Aggressive Behavior, Order and Organization, Program Clarity) was related to one or more of the addressed dependent variables. Scoring high on the subscale of Program Clarity was significantly associated with high scores on the work environment factors of Empowering Leadership and Role Clarity (Paper II). Also, high scores on Personal Problem Orientation were found to be related to high ratings of Empowering Leadership, and Order and Organization and Practical Orientation were associated with Organizational Climate (Paper II). Low scores on the subscale of Involvement were significantly associated with high levels of Perceived Stress (Paper III) and high scores on Angry and Aggressive Behavior increased the risk of appraising the Stress of Conscience subscale Internal Demands as high (Paper IV).
The nursing staff’s work situation, stress, and sense of control

The mean scores of the psychosocial work environment subscales indicate that the participants scored moderately high (2.89-3.87) on most of the subscales. A lower mean score (1.7) was found for the subscale Support from Superiors. No differences were found between registered nurses and nurse assistants concerning the psychosocial work environment (Papers II-III). The results of the present thesis also indicate that two of the psychosocial work environment subscales were important for the nursing staff’s appraised stress. Low scores on the subscale Role Clarity was related to high levels of Perceived Stress (Paper III) and low ratings on Control at Work were significantly associated with increased risk of perceiving high levels regarding both Stress of Conscience subscales, namely Internal Demands and External Demands and Restrictions (Paper IV).

The results of the nursing staff’s appraised levels of stress showed that the mean scores were 22.6 (Highest possible value = 56) for Perceived Stress (Paper III), 41.4 (Highest possible value = 225) for total Stress of Conscience, 24.6 (Highest possible value = 125) for the individual subscale Internal Demands and 26.1 (Highest possible value = 125) for External Demands and Restrictions (Paper IV). In terms of Moral Sensitivity and Mastery, the mean scores of the nursing staff indicate that Sense of Moral Burden was rated according to the middle level alternatives (Mean = 13.9; Highest possible value= 24), whereas the ratings of Moral Strength (Mean = 14.7; Highest possible value = 18) and Mastery (Mean = 22.8; Highest possible value = 28) were found in the upper level alternatives (Paper IV). The results also showed that there were no significant differences between any of the nursing staff characteristics and stress, Moral Sensitivity, and the Mastery variables (Papers III-IV).

Logistic regression analysis showed that the Moral Sensitivity subscale Sense of Moral Burden was important for the understanding of Stress of Conscience. Belonging to the high level group on Sense of Moral Burden increased the likelihood of perceiving high Stress of Conscience, both regarding Internal Demands, and External Demands and Restrictions. A high sense of Mastery was on the other hand found to lower the risk of Stress of Conscience (Paper IV).
DISCUSSION

The findings of the present thesis provide some insight into the nursing staff’s work situation and highlight several important relationships between environmental and individual factors that need to be considered. The result may serve as a foundation for further research in this field and for making suggestions about how to improve the working conditions of the nursing staff in psychiatric in-patient care, which will be further discussed below.

The Ward Atmosphere Scale

As mentioned previously, several researchers have proposed some critiques of the WAS. Røssberg’s and Friis’s (2003a; 2003) revision of the WAS was attempted in order to preserve the instrument for continuing use in research. This idea is appealing and initiated the test of this revision in Sweden. The results of the present thesis, however, provide additional support to the critique posed by previous authors.

The results from Paper I showed some promising findings concerning several of the investigated properties of the instrument. One of the criticisms aimed at the WAS referred to the length of the instrument being a problem and this may still be a concern, especially for larger research projects, where several instruments may be needed. The internal consistency of the revised WAS differed between the samples in Paper I and Papers II-IV. Several of the subscales showed, however, poor internal consistency in both samples. Few recent studies exist that present Cronbach’s alpha results for the WAS subscales, thus making comparisons with previous research difficult. In comparison with the revised Norwegian version (Røssberg & Friis, 2003a; 2003b), however, the internal consistency were similar concerning several of the subscales. Røssberg
and Friis (2003a; 2003b) obtained alpha values of > 0.7 on two subscales for the patients and two for the staff. In the present thesis, two subscales also attained a Cronbach’s alpha > 0.7 for the patients, while six subscales reached that level for the staff (Paper I). In Papers II-IV no subscales reached that limit however. The internal consistency of the WAS subscales appears to differ substantially between studies and settings. Poor internal consistency for the Autonomy subscale has, however, been found in previous studies as well (Røssberg & Friis, 2003b; Sørlie et al., 2010), thus indicating that this subscale might need further revision. Future projects should calculate the Cronbach’s alpha values before using the WAS subscales for analyses.

A previous critique of the WAS concerned the fact that it clearly measured less than ten factors (Alden, 1978; Denny et al., 1984; Moos, 1997). Moreover, the WAS subscale scores have shown strong inter-correlations among several of the subscales (Røssberg & Friis, 2003b; Sørlie et al., 2010). According to Porter and Carter (2000) the phenomenon being measured by an instrument must be clearly defined. There is, at present, no clear definition available concerning the ward atmosphere, and this may be one reason why the factor structure of the WAS cannot be confirmed. For several reasons it might be wise to try to define the ward atmosphere more clearly and more research is thus needed in the future in order to achieve this. The physical milieu might also need to be included in a definition of the ward atmosphere, as proposed by the participants in Paper I and suggested in the background of the present thesis (cf. Figure 2).

Contemplating the nursing staff’s work situation

The present findings indicate that all six ward atmosphere subscales used were related to some aspects of the nursing staff’s work situation. Røssberg and Friis (2004) found that staff satisfaction with the ward was only moderately correlated with their scores of the ward atmosphere. The authors’ conclude that the ward atmosphere may be more important for patient satisfaction than staff satisfaction. Although staff satisfaction was not investigated in the present thesis, the finding suggests that the ward atmosphere is also an important aspect for the nursing staff. The discussion below focuses on some of the important findings in the present thesis, highlighting the relationships between the ward atmosphere and the nursing staff’s work situation.
Program and role clarity

The results indicated that perceiving a high sense of Program Clarity on the ward was important for the nursing staff’s experience of a high level of Empowering Leadership and Role Clarity (Paper II). Program Clarity involves how stable, evident and clear the treatment structure, rules and expectations are on the ward (Moos, 1997). The structure, rules and regime of psychiatric in-patient wards has been found to be important for both the patients and the staff (Alexander, 2006; Alexander & Bowers, 2004; Bowers, 2009; Mistral et al., 2002). For example, the meaning and motivation behind the rules and aims of a psychiatric ward needs to be transferred to the patients, which is described as a key aspect of psychiatric nursing care (Alexander, 2006). Patients have, in interviews, expressed that good ward routines and structure were experienced as denoting professionalism among the staff and gave a feeling of being cared for (Borge & Fagermoen, 2008). A relationship between nurses’ experiences of rule enforcement and role clarity has also been found in another study in psychiatric care (Alexander, 2006).

In the present thesis, a low sense of Role Clarity was found to be related to high levels of Perceived Stress among the nursing staff (Paper III). The importance of clear roles for the nursing staff in psychiatric care has been highlighted in several studies, for example, a relationship between lack of role clarity and stress has been demonstrated (Carpenter, Ring, Sangster, Cambridge & Hatzidimitriadou, 2000; Gulliver et al., 2003; Melchior, Bours, Schmitz & Wittich, 1997; Spear et al., 2004) and clear roles have shown to be positively correlated with job satisfaction (Spear et al., 2004). Research has shown that the aim and ideology of in-patient care lack clarity (Bowers, Chaplin, Quirk & Lelliot, 2009), however, which may serve as an explanation of the finding of the relationship between Program Clarity and Role Clarity in the present thesis. This thesis also pointed to the importance of the Program Clarity for the nursing staff’s perception of Empowering Leadership (Paper II). This corroborates findings from previous research, showing that workplace empowerment and leadership empowerment are important for general and psychiatric nurses’ job satisfaction (Laschinger & Finegan, 2005; Lautizi et al., 2009) and for reducing the risk of stress (Lautizi et al., 2009).

It thus seems important to strengthen the sense of Role Clarity and Leadership Empowerment in psychiatric nursing staff. A possible way to achieve this could be to focus on the Program Clarity of the ward. Mistral et al (2002) improved the functioning of psychiatric wards by for example, clarifying the
aims, rules, and structure of the ward. The ward manager was found to have an important role in the implementation of the changes. Future changes in order to improve the Program Clarity, and by doing so the Role Clarity and Empowering Leadership, may be accomplished by the interventions proposed by Mistral et al. (2002). By introducing meetings which involve both staff and patients, the staff-patient communication and the ward atmosphere could improve. In fact, by creating daily staff-patient meetings the patient ratings of the ward atmosphere subscales Involvement, Support and Practical Orientation were higher. The staff’s perceptions were however not investigated in that study (Hansen & Slevin, 1996). It may also be important to develop clear rules and a rationale for the care and treatment, and make this known to all staff and patients. The ward manager could have an important role in the initiative and implementations of these changes. Such development may not only improve the situation for the staff, but also the psychiatric nursing care. There is a need for further research to reveal how such improvements may affect the situation for both the nursing staff and patients.

**Perceptions of patient activity, interaction and aggression**

The findings of the present thesis also concern the importance of Involvement and Angry and Aggressive Behavior for the nursing staff’s perceptions of stress. High ratings of Involvement as perceived by the nursing staff were, for example, related to lower levels of Perceived Stress (Paper III). Involvement measures the degree of activity, engagement and energy among the patients in the ward (Moos, 1997). Several studies have raised a concern about the lack of patient activities on psychiatric in-patient wards. In a recent literature review of nurse and patient activities and interaction on psychiatric inpatient wards, the authors found that very little patient activity and social engagement occurred on the wards and that many patients spent their time in isolation (Sharac et al., 2010). According to interviews with patients and staff, the admission to a psychiatric ward was experienced as being boring by the patients, and the staff felt that there was not enough diversity of activities for the patients (Shatell et al., 2008). For several reasons it is possible that high levels of patient activity on the wards may be experienced as rewarding by the nursing staff. In a study by Dodds and Bowles (2001), patients’ satisfaction increased and staff sickness decreased after an intervention based on structured patient activity had been implemented. High levels of patient activity and social engagement may facilitate for the staff to observe and interact with the patients.
It can also be argued that patient activities on the ward should be seen as a nursing action and as part of the care and treatment of the patients. A possible way to improve patient engagement and activity on psychiatric in-patient wards could be to offer staff training in different group activities (Sharac et al., 2010).

The results of the present thesis also acknowledge the importance of Angry and Aggressive Behavior for the nursing staff’s perceived Internal Demands, as a part of the assessed Stress of Conscience (Paper IV). Angry and Aggressive Behavior involves how much patients argue with each other and with staff, express open anger, and display other aggressive behaviors (Moos, 1997). Patient aggression and violence is a commonly occurring event in psychiatric care and research. Psychiatric care has been described as a “high-risk” area and psychiatric nursing staff as often being exposed to patient aggression and violence (Bilgin & Buzlu, 2006; Currid, 2009; McKenna, Poole, Smith, Coverdale & Gale 2003; Owen, Tarantello, Jones & Tennent, 1998). Reducing the risk of aggression and violence on psychiatric wards seems to be of high priority in clinical practice and research. Several studies have investigated the effects of different kinds of staff training and risk assessments (Kamaldeep et al., 2001; McGowan, Wynaden, Harding, Yassine & Parker, 1999) and ongoing staff training and support has been suggested as being vital (Delaney, Cleary, Jordan & Horsfall, 2001). Moreover, the importance of being able to predict and prevent aggression and violence has been emphasized (Nijman, Merckelbach, Evers, Palmstierna & à Campo, 2002; Palmstierna & Wistedt, 2000). The nursing staff’s attitudes and perceptions concerning aggression and violence have been described as dysfunctional and undesirable, but also as understandable and functional (Abderhalde, Needham, Fiedli, Poelmans & Dassen, 2002). A strong sense of personal accomplishment at work, among psychiatric nurses, has been found to be correlated with a strong tendency to agree that aggression can be tolerated (Whittington & Higgins, 2002). However, patients’ aggressive behavior and violence has generally been found to create stress among psychiatric nursing staff (Currid, 2009; Jenkins & Elliot, 2004; Taylor & Barling, 2004). Few previous studies have investigated the importance of Angry and Aggressive Behavior in terms of Stress of Conscience among psychiatric nursing staff.

Aggression and violence create complex feelings and reactions due to their interactional and emotional dimensions (Palmstierna & Wistedt, 2000). It is thus possible that Angry and Aggressive Behavior may create ethical dilemmas
among the nursing staff and cause Stress of Conscience, as indicated in Paper IV. Another possible interpretation could be that high levels of Angry and Aggressive Behavior may be experienced as a failure to deliver care and meet the patient’s needs. Previous research indicates that when the nursing staff is not able to give care in accordance with their professional and ethical beliefs, there is a risk of Stress for Conscience (Lützén et al., 2003; Lützén et al., 2006). Other studies have also indicated that the contradictive nature of nursing in psychiatric in-patient care – the will to do good and the demands for effectiveness – can create stress (Hummelvoll & Severinsson, 2001). Furthermore, one can also speculate that Angry and Aggressive Behavior may be experienced as morally burdensome. In the present thesis a great sense of Moral Burden increased the risk of perceiving high Internal and External Demands, the two aspects of Stress of Conscience (Paper IV). Moral Burden could be considered to be the negative dimension in Moral Sensitivity, and high levels in the Moral Burden factor could therefore increase a person’s vulnerability for Stress of Conscience. This assumption has also been highlighted in previous studies (Glasberg, Eriksson & Norberg, 2008; Lützén et al., 2010). Moreover, high levels of Moral Sensitivity could make a person experience ethical demands more distinctly (Glasberg, Eriksson & Norberg, 2007). One possible interpretation of the findings in the present thesis could be that the nursing staff perceive moral dilemmas and demands, caused by for example Angry and Aggressive Behaviors, and that this creates a troubled conscience when they are not able to act in agreement with their professional beliefs and will to provide good care. Being as Stress of Conscience has been found to increase the risk of burnout in different care settings (Juthberg, Eriksson, Norberg & Sundin, 2008; Glasberg et al., 2007; Gustafsson, Eriksson, Strandberg & Norberg, 2010), this aspect needs to be taken into account in order to improve the work situation in psychiatric in-patient care.

Perceived control
A key finding in the present thesis concerns the nursing staff’s perceived control. Two aspects of control were found to be important for the nursing staff’s Stress of Conscience. The first one refers to the staff’s Control at Work and the second to their perceived Mastery. High levels of Control at Work were found to be a protective factor against high levels of Internal and External Demands and Restrictions. Control at Work was also found to have a protecting function against total Stress of Conscience (Paper IV). The importance of
control has been demonstrated in several studies. For example, a high sense of Mastery has been found to be a protective factor against stress among carers of persons with Alzheimer’s disease (Mausbach et al., 2006; Mausbach et al., 2007), and Control at Work to be an important beneficial work environmental aspect in relation to the staff’s health and well-being in nursing homes and significantly associated with stress (Testad et al., 2010). Moreover, low levels of control have been shown to predict stress-related disorders (Nieuwenhuijsen, Bruinvelds & Frings-Dresen, 2010) and to be associated with stress and poor health among psychiatric nurses (Shen, Cheng, Tsai, Lee & Guo, 2005). Previous research also indicates that moral stress occurs when staff are morally sensitive in patient care but lack control over the situation (Lützén et al., 2003). There are thus several examples of the importance of perceiving a sufficient level of control. In order to prevent Stress of Conscience, actions to strengthen the nursing staff’s control and involvement at work and in decisions might be vital. Further research is needed to explore this.

Understanding the person-environment relationship

As described in the background, the person-environment relationship needs to be considered in order to gain a better understanding of the nursing staff’s working conditions in psychiatric care. As suggested in Figure 1, the findings indicate that the areas investigated in the present thesis are interwoven and that mutual feedback exists between them. The environment, furthest to the left in the figure (cf. Figure 1), was in this thesis operationalized as the ward atmosphere and the work environment. This environmental area influences the other areas in the figure, but environmental aspects may also influence each other. This is illustrated by the fact that the Program Clarity aspect of the ward atmosphere was related to the Role Clarity aspect in the psychosocial work environment (Paper II). Role Clarity was also found to be important for the nursing staff’s Perceived Stress (Paper III) which also demonstrates the complex and interwoven nature of the person-environment approach described in Figure 1. Furthermore, aspects of Mastery may affect and mediate the stress process and the outcome, as shown in Paper IV.

The model presented in Figure 1 has been used in order to understand the nursing staff’s situation in psychiatric in-patient care. An additional important aspect is, however, that the process illustrated in the figure also incorporates the patients on the ward. In the discussion above, several examples have been
given of how the nursing staff’s situation may influence, and be influenced by, the care and the patients. It can therefore be assumed that changes aimed at the nursing staff’s situation also generate consequences for the care and treatment of the patients. For example, improvements in the structure, rules and ideology in use on the ward and the care could help to prevent stress in the nursing staff, as well as improving the care of the patients.

**Methodological considerations**

**Choice of data analysis methods**

Three methodological aspects guided the choice of methods for data analysis in the present thesis; the fact that the variables were not normally distributed, the use of ordinal scales, and the rather small sample sizes. The first two aspects are proposed to be suitable determinants for choosing nonparametric statistics (Altman, 1991; Siegel & Castellan, 1988). Siegel and Castellan (1988) further suggest that nonparametric statistics are suitable for small sample sizes. These aspects, together with the aims of the respective papers (I-IV), led to the choice and use of nonparametric statistics. The Mann Whitney's U-test has been described to be “one of the few non-parametric statistics that has a useful interpretation” (Altman, 1991, p. 195) and to be a powerful nonparametric test (Siegel & Castellan, 1988), and was considered an appropriate choice for comparisons of two independent groups in the present thesis (Papers II-IV). Spearman rank correlations were used (Siegel & Castellan, 1988) for calculation of associations between variables being as the present thesis included ordinal scales.

**Psychometric considerations of the measurements**

The reliability and validity of instruments are important aspects in research (Streiner & Norman, 2008). Most of the instruments used in the present thesis are previously tested and validated; however, the instrument used to assess social and psychological factors at work, QPSNordic 34+, had not been previously investigated for subscales and factors. The psychosocial work environment subscales developed and used in Papers II-IV were tested for internal consistency with promising Cronbach’s alpha results (>0.7). However, future research using the QPSNordic 34+ should include further psychometric testing. The internal consistencies for the other included instrument were ade-
quate, except for the third factor in the moral Sensitivity Questionnaire (Moral Responsibility) which was excluded from further analysis (Paper IV).

In Paper I, the content validity, construct validity and usability of the revised Ward Atmosphere Scale (WAS) was investigated. In this study (Paper I), both patients and staff were used as experts to evaluate this aspect. Construct validity investigates whether an instrument measures an underlying theory (Porter & Carter, 2000), and in Paper I the Good Milieu Index (GMI) was used to analyze the underlying theory of the revised WAS. The findings indicate that the GMI and the revised WAS measure two different constructs, and the GMI was thus not the ideal instrument for the purpose of testing the construct validity of the WAS. In addition, the participants' opinions of the usability of the revised WAS was sought. This was performed by analyzing responses to a content validity and usability questionnaire. Some important information was obtained by including the participants' opinions of the usability of the instrument.

Design and sampling
The cross-sectional design used for the papers (I-IV) in the present thesis has addressed both descriptive information and associations between variables. A cross-sectional study only collects data at one single point in time (Altman, 1991), and it is possible that the participants' perceptions will change over time. A concern raised with cross-sectional studies is the problem with non-responses, and it is therefore valuable to assess differences between non-responders and responders (Altman, 1991). In Paper I data for the non-responders were not collected and a drop-out analysis was therefore not possible to perform. In Papers II-IV some information about the non-responders was obtained (age, type of staff), and this information showed that the non-responders did not differ from the responders in these aspects. The information concerning the gender of the non-responders was, however, not available for all investigated wards. The fact that the majority of the respondents were female highlights a situation common among employees working in healthcare. Ideally, a sample should be representative of the whole group from which it has been recruited (Porter & Carter, 2000). The available information regarding the non-responders in the present thesis point towards the sample for Papers II-IV being representative for all the nursing staff at the 12 investigated wards. Further, the response rate was lower than desired in all four papers (50%-59%), and the sample sizes were not optimal. Thus, it cannot be
excluded that the responders had perceptions that differed from those of the non-responders. Furthermore, the wards participating in the present thesis consisted of 15 general acute psychiatric in-patient wards and one rehabilitation unit for patients with psychosis. This sets some limitations in terms of generalizability of the findings of Papers I-IV.
CONCLUDING REMARKS

The present thesis has generated some findings that hopefully may help in the understanding of the nursing staff’s working conditions in psychiatric in-patient care. Firstly, the results illustrate the complexity of understanding and measuring the ward atmosphere. There is a need for a clear definition of what constitutes the ward atmosphere and further research is needed in order to achieve this. Furthermore, the findings of the revised Ward Atmosphere Scale involved some reliability problems that need to be addressed in future studies. Secondly, the findings highlight the importance of clarity concerning the nursing staff’s roles and the ward structure and regime. Improving clarity in these aspects could be beneficial for both the staff and the patient care. The ward manager could have an important role in this initiative and implementations of changes aimed at improving the clarity. This may be accomplished by providing opportunities for communication, establishing a ward and care ideology and expressing clear aims at the wards. Further research is needed in particular regarding the potential rewards of clarifying the rules and ideology for both patient and staff. Thirdly, a high level of patient activity seems important for the nursing staff’s Perceived Stress. There might be a need for increasing the activity level in psychiatric in-patient care, and this could be beneficial for both staff and patients. A possible way to accomplish this could be to offer activities that can be lead by the staff. Furthermore patient aggression is an important aspect for the nursing staff’s Stress of Conscience and needs to be taken into account when trying to prevent stress in psychiatric in-patient care. Fourthly, Mastery and Control at Work may function as protective factors and prevent stress and Stress of Conscience. There can thus be a need to make improvements in these aspects of psychiatric in-patient care. Finally, both the environment and the person, as well as their mutual links, need to be considered in order to understand and improve the nursing staff’s work situation. The present
thesis has presented some findings that could be used in order to understand the complex nature of the ward atmosphere, the psychosocial work environment and stress, but much remains to be done. More research is called for that explores the relationships and interplay between a person and his/her environment and how changes in one area may have effects in other areas as well. Future research should also include qualitative studies in order to deepen the understanding of the phenomena and relationships studied in this thesis.
POPULÄRVETENSKAPLIG
SAMMANFATTNING


Det övergripande syftet med denna avhandling var att undersöka vårdpersonalens uppfattningar om, och relationen mellan, vårdmiljö, psykosocial arbetsmiljö och stress i den psykiatriska slutenvården.

Denna avhandling bygger på fyra olika studier. I den första studien medverkade patienter och personal från tre allmänpsykiatriska slutenvårdsavdelningar och en rehabiliteringsavdelning för patienter med psykossjukdom. I de övriga tre studierna deltog personal från 12 olika allmänpsykiatriska slutenvårdsavdelningar. Generellt sett är avhandlingen baserad på sex enkäter som patienter och personal fyllt i. Dessa enkäter mäter vårdmiljö, psykosocial arbetsmiljö, stress, samvetsstress, moralisk lyhördhet och upplevd egenkontroll. Svaren från enkäterna analyserades med hjälp av statistik för att beskriva deltagarnas uppfattningar, skillnader mellan sjuksköterskor och skötare samt förhållandet mellan de olika delarna i enkäterna.

Resultaten från den första studien visade att enkäten som mäter vårdmiljö var användbar och tillförlitlig när det gäller de flesta aspekterna. Resultaten från de övriga tre studierna visade däremot att tillförlitligheten var sämre. Det

Resultatet av denna avhandling pekar mot att förbättringar i vårdmiljön skulle kunna skapa förbättringar gällande den psykosociala arbetsmiljön för personal som arbetar i slutenvårdspsykiatrin. Exempelvis verkar utbudet av aktiviteter för patienterna på avdelningen ha betydelse, och en ökning av patientaktivitet skulle både kunna skapa förbättringar i vården och minska personalens stress. Att fastställa och säkerhetsställa en tydlighet när det gäller regler, rutiner och personalens roller är också viktigt, både för arbetsmiljön och för att förhindra stress. Även personalens upplevda egenkontroll och arbetskontroll tycks viktiga, och en förbättring inom dessa områden skulle kunna hjälpa till att reducera risken för stress bland personalen.
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HANNA TUVESSON

PSYCHIATRIC NURSING STAFF AND THE WORKPLACE

Perceptions of the ward atmosphere, psychosocial work environment, and stress