

Umeå University Medical Dissertations, New Series, No 1702

Stress of conscience and burnout among healthcare personnel working in residential care of older people

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Umeå University 2015

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ISBN: 978-91-7601-229-1
ISSN: 0346-6612
Electronic version available at <http://umu.diva-portal.org/>
Printed by: Print & media, Umeå University
Umeå, Sweden 2015

To Malin, Jacob and Ilsa with love

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Abstract

Background This thesis was part of the research programme ‘Stress of Conscience and Burnout among Healthcare Personnel in Elderly Care’ at Umeå University. Relationships have been found between stress of conscience, perception of conscience, burnout, and social support. No longitudinal studies investigating these relationships have been performed previously, thus it was not known how these relationships develop over time. Neither was it known how stress of conscience and other phenomena of importance might vary between organisations because no comparative studies have been performed. It seems important to organize the care of older people in such a way that healthcare personnel can stay healthy at their workplace, especially because the aging population is expected to grow. Studies have shown that stress of conscience is associated with the well being of healthcare personnel and the quality of care they provide. In order to develop measures against stress of conscience, it seems important to gain a deeper understanding of the aspects in daily work that can generate troubled conscience among healthcare personnel.

Aim The overall aim of this thesis was to describe, compare, and investigate longitudinal relationships between stress of conscience, perceptions of conscience, burnout, social support and person-centred care among healthcare personnel working in two different organisations for residential care of older people. Furthermore, the aim was to deepen the understanding of some aspects of importance that generate troubled conscience at each of the two organisations. Based on the emerging knowledge from the research programme and the results from studies I and II, important aspects that can generate troubled conscience among healthcare personnel were shown to be working with guidelines and working during times of downsizing and reorganisation.

Methods Studies I and II took quantitative approaches with a longitudinal design (I) and a cross-sectional design (II), while studies III and IV were based on a qualitative approach. In study I, the participants were healthcare personnel working in an organisation for residential care of older people with a public mode of operation located in a small town in northern Sweden (baseline $n = 488$, follow-up $n = 277$). In study II, the participants were healthcare personnel working in two different organisations chosen to be as different from each other as possible regarding their characteristics. In this study, an organisation with a private mode of operation and located in a large city in the south of Sweden ($n = 98$) was compared to the baseline data from the publically run organisation from the small town in study I ($n =$

488). In studies III ($n = 8$) and IV ($n = 7$), the participants were care providers working at the same public organisation (III) and private organisation (IV) as in studies I and II. Quantitative data were analysed using partial least square regression with jack-knife approximate t-tests, hierarchical cluster analysis with multiscale bootstrap resampling, descriptive statistics, hypotheses tests, effect size measures, and confidence intervals. Qualitative data were analysed using qualitative content analysis.

Results The main results showed that the healthcare personnel reported higher levels of stress of conscience than have been reported in other studies. Perceiving one's conscience as a burden, having high levels of emotional exhaustion and depersonalisation, and noticing disturbing conflicts between co-workers were positively associated with stress of conscience. Associations between stress of conscience and perceiving one's conscience as a burden and burnout were similar among healthcare personnel despite the differences in the characteristics of the organisations they worked in. Women reported higher levels of stress of conscience and less social support from their co-workers compared to men. This thesis also provides new insights about how working according to guidelines and during times of downsizing and reorganisation can be burdensome issues for care providers and can generate troubled conscience. An overall understanding of care providers experiences of guidelines in daily work was revealed as struggling to do their best; prioritising between arcane guidelines while keeping the residents' needs in the foreground. They described experiences that guidelines were coming from above, were controlling and not sufficiently anchored at their workplace. They also described guidelines as stealing time from residents, colliding with each other, lacking practical use and complicating care, and challenging their judgment. An overall understanding of care providers' experiences of working during times of downsizing and reorganisation was revealed as perceiving oneself as pinioned in between current circumstances to provide care and what one's conscience conveyed. They perceived loss of good management, changed working conditions as exhausting and activating their conscience. They also expressed how they perceived troubled conscience when working conditions decreased the quality of care.

Conclusion The results is reflected on in relation to a nursing care model as it seems important to understand the results from a society- and organizational perspective as well as from an individual perspective. The results of the thesis show that it is important to provide healthcare personnel with opportunities to follow and express what their conscience tells them at their workplace in order to buffer the effects of stress of conscience. Support, knowledge, involvement, time, and additional resources are key issues that

can help care providers to work more constructively with guidelines in their daily practice. The results show that in times of downsizing and reorganisation it is important to exercise leadership that promotes care providers' feelings of involvement, security, and togetherness in order to relieve some of the healthcare personnel's burdensome experiences. An overall understanding of the results is that it seems important to organize the residential care of older people in such a way that registered nurses and leaders are able to be present in healthcare personnel's daily practice. Healthcare personnel need attendant and supportive leaders who can help them to solve various forms of work-related problems and to help them make priorities in the daily care of residents. This seems important regardless of whether the priorities are between guidelines and residents' needs or a consequence of an increasingly stressful work environment during times of downsizing and reorganisation. Further studies are needed in order to investigate the importance of gender in relation to stress of conscience and if different kinds of support are needed for women than for men in order to buffer the effects of stress of conscience. Finally, more longitudinal multilevel studies are needed in order to investigate how organisations' characteristics and organisational changes affect healthcare personnel's levels of stress of conscience.

Keywords Healthcare personnel, stress of conscience, burnout, social support, guidelines, downsizing, reorganisation, care of older people.

Original papers

The thesis is based on the following papers, and each paper will be referred to in the text by its Roman numeral.

- I. Åhlin J, Ericson-Lidman E, Eriksson S, Norberg A, Strandberg G. (2013). Longitudinal relationships between stress of conscience and concepts of importance. *Nursing Ethics*, 20: 927-942.
- II. Åhlin J, Ericson-Lidman E, Norberg A, Strandberg G. (2014). A comparison of assessments and relationships of stress of conscience, perceptions of conscience, burnout and social support between healthcare personnel working at two different organizations for care of older people. *Scandinavian Journal of Caring Sciences*, doi: 10.1111/scs.12161.
- III. Åhlin J, Ericson-Lidman E, Norberg A, Strandberg G. (2014). Care providers' experiences of guidelines in daily work at a municipal residential care facility for older people, *Scandinavian Journal of Caring Sciences*, 28: 355-363.
- IV. Åhlin J, Strandberg G, Norberg A, Ternstedt B-M, Seiger Cronfalk B, Ericson-Lidman E. Care providers' narrated experiences of working in private residential care for older people during downsizing and reorganization with focus on troubled conscience. Submitted.

Abbreviations

AU – approximately unbiased p -values

CI – confidence interval

d – Cohen's d

DP – depersonalization

EE – emotional exhaustion

ENs – enrolled nurses

η^2 – eta-squared

h – effect size index

HCP – healthcare personnel

MBI – Maslach Burnout Inventory

NAs – nurse assistants

PCCQ – Person-Centred Climate Questionnaire

PCQ – Perceptions of Conscience Questionnaire

ϕ – phi coefficient

PLSR – partial least square regression

RNs – registered nurses

RR – relative risk

SCQ – Stress of Conscience Questionnaire

SocIS – Social Support

Abstrakt på svenska

Bakgrund Denna avhandling var en del av forskningsprojektet ”Samvetsstress och utbrändhet bland personal inom äldreomsorg”, vid Umeå universitet. Resultat har visat att det finns samband mellan samvetsstress, syn på samvete, utbrändhet och socialt stöd. Inga longitudinella studier som undersöker dessa samband har utförts tidigare och därför är det inte känt hur dessa samband kan utvecklas över tid. Det är inte heller känt hur samvetsstress och andra betydelsefulla fenomen kan variera mellan organisationer eftersom jämförande studier saknas. Det är viktigt att organisera vården av äldre personer på ett sådant sätt att vårdpersonal kan hålla sig friska på sina arbetsplatser, i synnerhet med tanke på att andelen äldre i befolkningen förväntas öka. Studier har visat att samvetsstress är relaterat med vårdpersonalens välbefinnande och kvaliteten på den vård de tillhandahåller. För att utveckla åtgärder mot samvetsstress är det viktigt att få en djupare förståelse om aspekter i det dagliga arbetet som kan generera dåligt samvete hos vårdpersonal.

Syfte Det övergripande syftet med avhandlingen var att beskriva, jämföra och undersöka longitudinella samband mellan samvetsstress, syn på samvete, utbrändhet, socialt stöd och personcentrerad vård bland vårdpersonal som arbetar inom två olika organisationer för äldreomsorg. Syftet innefattade även att fördjupa förståelsen av betydelsefulla aspekter som genererar dåligt samvete inom båda organisationerna. Baserat på den framväxande kunskapen från forskningsprogrammet och resultaten från delstudierna I och II framkom det att viktiga aspekter som kan generera dåligt samvete var att arbeta med riktlinjer och att arbeta i tider av nedskärning och omorganisering.

Metod Studierna I och II baseras på kvantitativa metoder, en med longitudinell design (I) och en med tvärsnittsstudie design (II). Studierna III och IV baseras på kvalitativ metod. Deltagarna i delstudie I bestod av vårdpersonal som arbetade inom en offentlig organisation för äldreomsorg lokaliserad i en liten stad i norra Sverige (baseline $n = 488$, uppföljning $n = 277$). Deltagarna i delstudie II var all vårdpersonal som arbetade inom två olika organisationer för äldreomsorg valda att vara så olika varandra som möjligt gällande olika karaktäristika. Den ena organisationen hade privat driftsform och var belägen i en stor stad i södra Sverige ($n = 98$), baseline data från studie I ($n = 488$) användes beträffande den andra organisationen. Delstudierna III ($n = 8$) och IV ($n = 7$) bestod av vårdpersonal som arbetar inom samma offentliga organisation (III) och privata organisation (IV) som i

delstudierna I och II. Kvantitativt data analyserades med 'partiel least squares regression' och 'jackknife' approximativa t-tester, hierarkisk klusteranalys med 'multiscale bootstrap resampling', beskrivande statistik, hypotestester, olika effektmått, konfidensintervall. Kvalitativa data analyserades med kvalitativ innehållsanalys.

Resultat Huvudresultaten visade att vårdpersonal skattade högre nivåer av samvetsstress jämfört med vad som har rapporterats i andra studier. Resultaten visade att uppfatta sitt samvete som en börda, höga nivåer av emotionell utmattning och cynism samt att bevittna störande konflikter mellan medarbetare var positivt korrelerat med samvetsstress. Trots stora skillnader gällande organisationernas karaktäristika var sambanden mellan samvetsstress och att uppfatta sitt samvete som en börda samt utbrändhet samstämmiga. Kvinnor skattade högre nivåer av samvetsstress och mindre socialt stöd från sina arbetskamrater jämfört med män. Denna avhandling ger också nya insikter om hur arbete i enlighet med riktlinjer och under tider av nedskärningar och omorganisering kan vara en tung börda för vårdpersonal att bära och hur det kan generera dåligt samvete. Den övergripande förståelsen av vårdpersonalens erfarenhet av riktlinjer i det dagliga arbetet visade att vårdpersonalen kämpar för att göra sitt bästa, prioriterar mellan svårbegripliga riktlinjer samtidigt som boendes behov hålls i förgrunden. Vårdpersonalen beskrev hur dom upplevde att riktlinjer kommer från ovan, är kontrollerande och inte tillräckligt förankrade. De beskrev också hur riktlinjer tar tid från de boende, krockar med varandra, saknar praktisk nytta och komplicerar omvårdnaden samt utmanar det egna omdömet. Den övergripande förståelsen av vårdpersonalens erfarenheter av att arbeta under tider av nedskärningar och omorganisering visade att vårdpersonalen uppfattar sig själv som bakbundna mellan rådande omständigheter att ge omvårdnad och vad deras samvete förmedlar. Vårdpersonalen upplevde sig vara utan gott ledarskap och förändrade arbetsvillkor som utmattande och aktiverade samvetet. Vårdpersonalen uttryckte också hur de fick dåligt samvete när de upplevde att arbetsförhållandena försämrade vårdkvaliteten.

Slutsatser Eftersom det förefaller viktigt att förstå resultaten utifrån ett samhälls- och organisationsperspektiv likväl som ur ett individperspektiv utförs reflektioner av resultaten utifrån en omvårdnadsmodell. Resultat i denna avhandling visar att det är viktigt att ge vårdpersonalen möjligheter att på sin arbetsplats följa och uttrycka vad deras samvete säger för att effekterna av samvetsstress ska mildras. Stöd, kunskap, engagemang, tid och övriga resurser är faktorer av betydelse som kan hjälpa vårdpersonal att arbeta mer konstruktivt med riktlinjer i sitt dagliga arbete. Resultaten visar att i tider präglade av nedskärningar och omorganisering är det viktigt med

ledarskap som främjar vårdpersonals känslor av engagemang, trygghet och gemenskap för att en del av vårdpersonalens betungande erfarenheter ska kunna lindras. En övergripande förståelse av resultaten är att det förefaller vara av vikt att äldreomsorgen organiseras på ett sådant sätt att sjuksköterskor och chefer har möjlighet att vara tillgängliga i vårdpersonalens dagliga praktiska arbete. Vårdpersonal behöver stödjande och tillgängliga ledare som kan hjälpa till att lösa olika former av arbetsrelaterade problem och att göra prioriteringar i den dagliga omvårdnaden. Detta förefaller vara av vikt oavsett om prioriteringarna är mellan riktlinjer och boendes behov eller en konsekvens av en av en alltmer stressig arbetsmiljö under tider av nedskärningar och omorganisering. Ytterligare studier behövs för att undersöka vikten av genus i relation till samvetsstress och om olika former av stöd behövs för kvinnor och män i syfte att mildra effekterna av samvetsstress. Det behövs fler longitudinella 'multilevel' studier för att kunna undersöka hur organisationers karaktäristiska kan påverka vårdpersonalens nivåer av samvetsstress.

Nyckelord vårdpersonal, samvetsstress, utbrändhet, socialt stöd, riktlinjer, nedskärningar, omorganisering, äldreomsorg.

Background

This thesis is part of the research programme ‘Stress of Conscience and Burnout among Healthcare Personnel (HCP) in Elderly Care’ at Umeå University. The research programme is based on results from the ‘Stress of Conscience Study’ at Umeå University. The motivation for the ‘Stress of Conscience Study’ came from years of nursing research during which many researchers had observed that personnel with various healthcare occupations without being asked talked about having troubled conscience when they could not provide the care they wanted to and that they believed was their duty to provide (Strandberg 2002, Sørli 2001, Rasmussen 1999, Söderberg 1999). Results from the ‘Stress of Conscience Study’ are presented in five doctoral theses (Gustafsson 2009, Dahlqvist 2008, Ericson-Lidman 2008, Juthberg 2008, Glasberg 2007). The purpose of the research programme ‘Stress of Conscience and Burnout among HCP in Elderly Care’, of which the current PhD project is a part, is twofold. The first part of the programme aims to describe and compare HCP’s perceptions of conscience, degree of stress of conscience, burnout scores, and their assessment of social support and person-centred climate in two organisations for residential care of older people and to analyse relationships and differences over time between these variables and to make comparisons within and between the two organisations. The second part of the programme aims to implement an intervention in the two organisations for residential care of older people with the purpose to in cooperation with HCP find ways to constructively deal with troubled conscience. The focus of this thesis lies within the first part of the programme, and it provides a statistical analysis in the form of descriptions, comparisons, and analyses of the relationships and differences among variables over time and within and between the two organisations. In addition to this, the intention has been to deepen the understanding of some aspects of importance that generate troubled conscience based on knowledge gained within the research programme.

My interest in residential care of older people can partly be explained by my own experiences of working in residential care of older people during the mid-1990s. After several years of working in other areas and studying at the university, I started my nursing studies in 2006. During my nursing studies, I once again was involved in residential care of older people as part of my studies and as part-time work. I noted that there had been a substantial transformation in the work environment compared with my previous experiences. The residents were older and sicker, and the HCP had more work tasks to perform with fewer personnel available. Many of my co-workers frequently expressed their frustration about this development. So

when I was asked to work for a few months as a project assistant within the research programme, I took the opportunity. During that time, my interest in stress of conscience (i.e. stress from troubled conscience) and related phenomena grew enormously. Thus, when I was offered the opportunity to continue to be involved in the research programme as a PhD student and would have the chance to deepen my knowledge about stress of conscience, I did not hesitate.

Care of older people

Approximately 87,600 people 65 years and older were living in residential care facilities in Sweden in 2012, which was about 5% of the general population (National Board of Health and Welfare, [NBHW] 2012¹). During the same year, 19% of the Swedish population was 65 years or older and this figure is expected to increase in the future (Statistics Sweden, 2012). This aging population is associated with several possible political, economic, and social challenges (Sciegaj, & Behr, 2010). For instance, the number of older people with dementia disease in Sweden has increased from 133,000 people in the year 2000 to 158,000 people in the year 2012, and this has resulted in increased costs for society (NBHW, 2014). Furthermore, with increased life expectancy the periods of reduced abilities and dependence on healthcare and social services are shifted upward in age but these periods do not get shorter (NBHW, 2012²). Consequently, the need for a well-functioning organisation of care for older people seems greater than ever before.

The organisation of care for older people in Sweden has undergone major changes in the past decades (NBHW, 2009¹). One major change occurred in 1992 when the Elderly reform were implemented. This new arrangement meant that municipalities were given the overall responsibility for social services and care for their elderly citizens (Larsson, & Szebehely, 2006, pp. 413–414). This has meant that registered nurses (RNs) who had previously been employed by the county councils were now employed by the municipalities (Karlsson, 2007). The RNs' professional role changed (Tunedal, & Fagerberg, 2001) and they became responsible for the medical care of an increasing number of residents who were increasingly ill (Harder *et al.*, 2000, p. 22). Other changes that have affected the HCP working in the care of older people are that knowledge requirements have increased and that HCP are assigned more work tasks (Swedish Work Environment Authority, [SWEA] 2014¹). The number of beds in residential care of older people decreased by approximately 25% (29,500 beds) from 2000 to 2012 (NBHW, 2014), and older people have increasingly received comprehensive home care (NBHW, 2012²). This trend of staying home and receiving care there increases the demands on HCP working in home care and at short-

term residential care facilities for older people (NBHW, 2009²). Likewise, this trend has consequences for relatives and family caregivers who often have to shoulder more responsibilities for the shortcomings in the healthcare system (NBHW, 2009¹). An additional major change in the care of older people is the on-going trend of New Public Management, which has resulted in a substantial increase in the number of private healthcare providers (Szebehely, 2011, pp. 215-229). The proportion of beds in residential care of older people in Sweden that is provided by the private sector has increased from 5% in 1993 to 21% in 2012 (Erlandsson *et al.*, 2013, p. 47.). Despite this major reorganisation, knowledge is limited about what possible consequences privatization of the care of older people might have for residents and HCP (Szebehely, 2011, p. 216). When investigating private and municipal organisations for the care of older people regarding the quality of care, the NBHW did not find any conclusive differences and concluded that knowledge is scarce regarding this issue and that more studies are needed (NBHW, 2012³).

At municipal residential care facilities for older people in Sweden, it is the enrolled nurses (ENs) and nurse assistants (NAs) who work closely with the residents and provide personal care and social services for them (cf. Juthberg, 2008, Karlsson, 2007). The RNs are responsible for the overall nursing care (Juthberg, 2008). They can have a consultative function (*ibid.*) and are often solely in charge with limited possibilities for discussion or consultation with colleagues or superiors (Josefsson, Sonde, & Wahlin, 2008). Working in care of older people in Sweden has been described as meaningful and stimulating but also as mentally and emotionally demanding and burdensome (Trydegård, 2005). In interviews, HCPs in residential care facilities for older people have narrated about emotionally demanding and burdensome situations which troubled their conscience (Ericson-Lidman *et al.* 2013). However, it has also been shown that HCP mainly perceive their conscience as an asset in their work and not as a burden (Juthberg, 2008).

Conscience

The term “conscience” is commonly used in everyday life, and people often describe the conscience as good, bad, troubled, or guilty. Linguistically, the word conscience originates from the Latin *conscientia*, which in turn can be deduced from the Greek *synderesis*. Both of these words carry the double meaning of “either the state (or act) of sharing knowledge or else simply knowledge, awareness or apprehension – even something like mind or thought”. Today, the perception of conscience as something that involves a sharing of knowledge with others has been lost (Langstone, 2001, pp. 7-8).

There are numerous descriptions of conscience in the philosophical, theological, and psychological literature. In protestant Christianity, conscience has been described as God's voice in the human being, and in the Catholic tradition it has been related to natural law (Hoose, 1999, pp. 50, 62-98). In Catholicism, it has been argued that our conscience might be fallible (1991), and thus it needs to be informed and educated with help and support from our fellow human beings (Ratzinger, 2007, pp. 27, 51, 62). Freud (1989/1930) saw conscience as the transposition of authorities' values and norms, and he linked conscience to the judging part of the superego. Freud argued that failing to live up to one's morality generates a bad conscience, which he claimed is made up of moral feelings such as shame, guilt, and remorse (ibid.). Fromm (1990/1947, pp. 141-171) made a distinction between what he called the "authoritarian conscience" and the "humanistic conscience". He described the authoritarian conscience as the internalised voice of authority that we are keen to please or that we fear displeasing and represents values that are taken for granted without reflection. Fromm regarded the humanistic conscience as the voice that calls us back to our humanity. This conscience is based on our intuitive knowledge of what is human and what is inhuman and is independent of external rewards and sanctions (ibid.). Philosophers often use the metaphor of "the voice" when they refer to conscience. For example, Ricoeur (1992) described conscience as a voice "at once inside me and higher than me" (p. 342) and claimed that "ones does not know or cannot say" what the origin of conscience is. Prior to Ricoeur, Heidegger had described conscience as a voice that calls from oneself to oneself ("Dasein's call to itself") (Heidegger, 1927/1962, pp. 56-64, 73).

Within the field of evolutionary psychology, it has been argued that conscience is a function of the brain. For example, Lineweaver argues that the conscience that we rely on to make moral decisions "are features of consciousness that have evolved under selection pressure, just like skin colour, intestinal pH and fingernail growth rates" (Lineweaver, 2008, pp. 171-181.). These kinds of thoughts are not surprising since there is a growing body of evidence that shows how moral cognition and social behaviours are associated with functions in our brains. For example, results from a review study have shown that there is a large agreement in recent studies about which brain regions support moral cognition (Moll, Oliveira-Souza, & Zahn, 2008). However, the aims of this thesis, the current research programme, and its predecessor have never been to explore what conscience is, but rather to investigate how HCP perceive it and what experiences they refer to when they talk about troubled conscience.

Perceptions of conscience

At the start of the “Stress of Conscience Study” there were no suitable instruments available for investigating conscience amongst HCP, and thus the Perception of Conscience Questionnaire (PCQ) was developed (Dahlqvist *et al.*, 2007). The initial results with the questionnaire showed that HCP working in different healthcare contexts in Sweden perceive their conscience, that is, its origin, function, and significance, as an authority, a warning signal, an asset, a burden, and as demanding sensitivity and depending on culture (Dahlqvist *et al.*, 2007). Since then, studies using the questionnaire have shown that the majority of RNs and NAs working in residential care of older people in Sweden view their conscience as an asset in their work (Juthberg *et al.*, 2010). In other words, 86% of RNs and 94% of NAs agreed with the statement that they could express what their conscience tells them at their workplace, and 88% of the RNs and 98% of the NAs agreed with the statement that they could follow their conscience in their work (Juthberg *et al.*, 2010). Results have also shown that perceiving one’s conscience as an asset is negatively associated with burnout (Juthberg *et al.*, 2008). This is consistent with the results from a study comparing a burnout group with a non-burnout group of HCP working in the same psychiatric and elderly care units (Gustafsson *et al.*, 2010). The results showed that perceiving one’s conscience as an asset characterised the non-burnout group (*ibid.*). Furthermore, results have shown that it seems to be a heavy burden to bear for HCP when they have to deaden their conscience in order to keep working in healthcare and have to reduce their aspirations to give good care. It is also burdensome that conscience can give wrong signals and needs to be interpreted. Feeling unable to live up to the expectations of patients, co-workers, and supervisors can also be a heavy burden to bear (Dahlqvist, 2008, pp. 37–38, Juthberg *et al.*, 2007). Results have shown that 36.2% of the HCP perceived their conscience as too strict and that 21.9% of them indicated that they needed to deaden their conscience in order to keep working in residential care of older people (Juthberg, 2008). This can be problematic because it has been shown that perceiving that conscience has to be deaden is positively associated with burnout (Glasberg, Eriksson, & Norberg, 2007, Juthberg *et al.*, 2008.) and stress of conscience (Glasberg *et al.*, 2007, Juthberg *et al.*, 2007). Perceiving that one’s conscience is far too strict has also been found to be positively associated with stress of conscience (Juthberg *et al.*, 2007). Taken together, these results indicate that perceiving one’s conscience as a burden is related to stress of conscience.

Stress of conscience

Stress of conscience is defined as “*a product of the frequency of the stressful situation and of the perceived degree of troubled conscience as rated by health care personnel themselves*” (Glasberg *et al.*, 2006). There are several other concepts that seem to be closely related to stress of conscience. Examples of such concepts are moral distress, moral stress (Lützén, & Ewalds Kvist, 2012), ethical stress (Raines, 2000), and ethical distress (Genuis, 2006), but the concept that seems to be most used is moral distress. A search of the PubMed database (November 2014) showed that the search term “moral distress” in the title or as a text word produced by far the highest numbers of articles compared to any of the other concepts mentioned above. Moral distress has been defined as “*when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action*” (Jameton, 1984, p. 6). Clearly, troubled conscience and thus stress of conscience can be generated when institutional/organisational constraints prevents HCPs from providing the care they want to give, but this is not the only source of stress of conscience. The concept of stress of conscience focuses on the stress from troubled conscience regardless of its origin, whether it is from organisational constraints, one’s own inabilities or lack of knowledge, or contradictory messages from one’s conscience (Glasberg, 2007). Consequently, stress of conscience can be seen to be a more comprehensive concept than moral distress because it concerns multidimensional aspects of what people perceive to generate troubled conscience no matter its origin.

Results have shown that HCP working in various healthcare settings in Sweden self-rate the highest levels of stress of conscience as coming from ‘lack of time to provide the care the residents need’, ‘being forced to provide care that feels wrong’, ‘having to deal with incompatible demands in one’s work’, and ‘perceiving one’s work in healthcare to be so demanding that one does not have the energy to devote oneself to one’s family as one would like’ (Juthberg *et al.*, 2010, Glasberg *et al.*, 2006). Stress of conscience from such issues can be rather problematic as results have shown that stress of conscience from these issues among HCP working in residential care of older people are positively associated with burnout (i.e. emotional exhaustion and depersonalisation) (Juthberg *et al.*, 2008). In addition, positive associations have also been found between stress of conscience from ‘witnessing patients being insulted and/or injured’, ‘feeling of being unable to live up to others expectations’, and ‘lowering ones aspirations to provide good care’ and burnout (*ibid.*). Furthermore, results have shown that HCP working in

residential care of older people who report having high levels of stress of conscience also report having more health complaints compared with those who report lower levels of stress of conscience (Orrung Wallin, Jakobsson, & Edberg, 2013). Stress of conscience has also been shown to be negatively associated with the quality of care in residential care and home care of older people (From, 2011).

The results from a qualitative study undertaken by Ericson-Lidman and co-workers identified situations in municipal elderly care that generated troubled conscience among HCP, and these suggest some underlying explanations for the quantitative results described above (2013). For example, the HCP described how they were being caught between people's different demands such as being torn between residents'-/relatives'-/and co-workers' needs and expectations. They also described how they were 'being torn away from residents to other 'must do's', for example when they experienced that 'obeying rules and recommendations' was stealing time from the care of residents. They also experienced troubled conscience when they felt unable to relieve suffering or lacked time to provide sufficient care for the residents. Care providers also described how troubled conscience was generated when they were 'being part of providing care that was or felt wrong', for example, when they experienced that they were witnessing co-workers providing poor care (Ericson-Lidman *et al.*, 2013). Studies have also shown that situations that generated troubled conscience among HCP working in residential care of older people were when they experienced shortcomings due to managing behavioural symptoms (Ericson-Lidman, & Strandberg, 2013¹), providing person-centred activities (Ericson-Lidman, & Strandberg, 2013²), dealing with deficient teamwork (Ericson-Lidman, & Strandberg, 2014¹), and mealtime schedule (Ericson-Lidman, & Strandberg, 2014²). HCP have also expressed how troubled conscience could be generated when they perceived shortcomings for not doing a good job, for example, when they lost their patience (Ericson-Lidman, Franklin Larsson, & Norberg, 2014). These kinds of situations are some examples of what can generate stress of conscience in daily practice among HCP working in residential care of older people, and these can have serious implications because stress of conscience can jeopardize the HCP's own health and the quality of care that they provide. No Studies have been found that have investigated if, and if so, how HCP's stress of conscience and perceptions of conscience develop over time. Furthermore, no comparative studies could be found comparing HCP's degrees of stress of conscience and perceptions of conscience between different organisations. It also seems important to include burnout in such investigations in order to further investigate associations between perceptions of conscience, stress of conscience, and burnout.

Burnout

Burnout is a complex and multifaceted phenomenon that affects the wellbeing of HCP, the quality of care they provide, and the costs of human services (Peterson, 2008). Between the years 1999 and 2003, the proportion of people on long-term sick leave due to mental disorders increased from 18% to 30% (Swedish Social Insurance Agency, [SSIA] 2010). The most common mental disorders were depression, stress-related conditions, and anxiety disorders. Between the years 1999 and 2003, burnout was a relatively common diagnosis, but after 2003 the number of people diagnosed with burnout declined, and this was mostly due to the implementation of the new diagnosis of Exhaustion Syndrome (SSIA, 2010).

The term burnout appeared in a psychological-psychiatric context already in the 1970s (Freudenberger, 1974), but to date there is still no generally accepted definition of burnout (Peterson, 2008) and at least 30 definitions and 132 symptoms of burnout are described in the literature (Schaufeli, & Enzmann, 1998). However, most authors agree that the term burnout is used to describe a stress and crisis syndrome that includes physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding (Hallsten, 2005, pp. 516-536). The most frequently used definition of burnout is formulated by Maslach (1982). She defined burnout as “a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind” (p. 3). More recently, researchers have increasingly considered burnout to consist of the two core dimensions of emotional exhaustion (EE) and depersonalization (DP), and they have dropped the personal accomplishment dimension (Maslach *et al.*, 2001, Bakker *et al.*, 2004). Initially this was done simply for methodological reasons, but an increasing number of authors have argued that personal accomplishment should be seen as a correlate or outcome of exhaustion and depersonalization rather than as a dimension of burnout (Halbesleben, 2008, p. 2). The notion that burnout is something that only occurs among professions with frequent human contact, especially those professions involved with healthcare and social work, has also changed, and many researchers now agree that burnout can occur within any profession (Maslach, Jackson, & Leiter, 1996). Furthermore, situations with long-term EE outside of work can cause burnout, for instance, long-term emotional exhaustion within a marriage (Pines, 1987). There is also some evidence for a positive causal relationship between work–family conflicts and emotional exhaustion (Glaser, & Hecht, 2013). Additionally, Gustafsson (2009) showed in her thesis that the risk of becoming or being burned out is influenced by many factors that affect both a person’s private and working life.

Some factors that have been found to be important in developing burnout include too heavy a workload, lack of control, inadequate recognition, absence of community, injustice, and conflicting values within the organisation (Leiter, & Maslach, 1999), and the importance of these factors has been confirmed in numerous recent studies (e.g. Fiabane *et al.*, 2013, Li *et al.*, 2013, Van Bogaert *et al.*, 2013, Rickard *et al.*, 2012, Kowalski *et al.*, 2010, Sherring, & Knight, 2009). Other factors shown to be important in developing burnout include reorganisation and downsizing (Nordang, Hall-Lord, & Farup, 2010, Magnusson Hanson *et al.*, 2008). Thus it is reasonable to believe that the reorganisation and downsizing in residential care of older people that has occurred in recent decades might have increased the risk for burnout among those working in the field. It seems important, therefore, to continue monitoring developments regarding burnout among HCP working in residential care of older people. It also seems important to perform longitudinal studies investigating the connection between burnout and stress of conscience as no such studies were found. Furthermore, because burnout is known to be associated with many negative effects on HCP and the care they provide, studies about factors that might buffer and/or prevent such effects, such as social support, seem important.

Social support

Numerous studies from different healthcare contexts have shown that social support is an important protective factor against work stress (e.g. Ashker, Penprase, & Salman, 2012, Teo, Yeung, & Chang, 2012, Adriaenssens *et al.*, 2011, Wright *et al.*, 2010). One description of social support is that it includes an exchange of resources between provider and receiver, wherein the provider's or receiver's intentions are to increase the well being of the receiver (Shumaker, & Brownell, 1984). Although results from studies investigating the relationship between social support and burnout have shown somewhat inconsistent results (Puwalowski, 2006, Halbesleben, & Buckley, 2004), social support is still regarded as an important factor in prevention of burnout (e.g. Kalicińska, Chylińska, & Wilczek-Różycka, 2012, Sundin, Hochwälder, & Lisspers, 2011, Eriksson *et al.*, 2009, Halbesleben, 2006). Social support can have a reducing effect on strain and it can have a moderating (or buffering) role in weakening the connection between stressors and strain. Social support from supervisors, co-workers, and those closely connected has been explored within the "Stress of Conscience Study". Results have shown that meanings of being a co-worker, supervisor and closely connected to a person developing burnout are a complicated struggle to support, as well as, shouldering a heavy burden. Results have also shown that people with symptoms of burnout can deny the

need for support, and attempts to help can be perceived as insulting from the receiver's perspective and the offered help might be rejected (Ericson-Lidman, 2008). Social support is, of course, only one potential protecting factor against work stress and burnout, and it is important to investigate other potentially important protecting factors. For example, person-centred care that has been shown to decrease nursing stress (McCormack *et al.*, 2010¹).

Person-centred care

The term person-centred care has been frequently used in the literature, but there is no uniform definition or understanding of the term (Morgan, & Yoder, 2012). In addition, authors have in many cases mixed up their terminology in such a way that advances toward conceptual clarity have been hampered. Terms like 'patient-centred', 'people-centred', 'person-centred', and 'relationship-centred' are sometimes used interchangeably or appear side by side (McCormack *et al.*, 2010²). Some terms might appear to be very similar but are really fundamentally different from each other, while other terms might appear to be different but sometimes are used as synonyms. For example, the terms personalized medicine and person-centred care might seem similar, but they are profoundly different. Personalized medicine views people from a biological perspective and uses biomarkers, genetic information, and images for diagnostics and treatment (Ekman, Norberg, & Swedberg, 2014, p. 79). Consequently, personalized medicine only provides descriptions about *what* I am but offers no knowledge about *who* I am, about my unique life story, who I am as a person which is central in person-centred care (Kristensson Uggla, 2014, pp. 36, 39-40). One example of terms that might appear to be different but are sometimes used synonymously are patient-centred care and person-centred care. A patient is a *role*, something changeable and reversible, but a person is unique and irreplaceable and is about identity (Kristensson Uggla, 2014, pp. 39-40). Therefore, it seems reasonable that patient-centred care and person-centred care are different concepts, and these have been described as such (Ekman *et al.*, 2014, p. 79, Kristensson Uggla, 2014, pp. 39-44). However, as Morgan and Yoder (2012) noted, even if the word person in person-centred care is used interchangeably with patient, client, and resident, the intent of the care delivery is congruent among the various expressions. One description (of many) of person-centred care is "a holistic (bio-psychosocial-spiritual) approach to delivering care that is respectful and individualized, allowing negotiation of care, and offering choice through a therapeutic relationship where persons are empowered to be involved in health decisions at whatever level is desired by that individual who is receiving the care" (Morgan, & Yoder, 2012, p. 8).

Person-centred care based on holistic and humanistic ideals is often described as synonymous with good-quality care, but only a few studies have provided support for this notion (Edvardsson, Winblad, & Sandman, 2008, McCormack, 2004). However, some recent empirical work has emerged in favour of this idea. For instance, McCormack et al. (2010¹) showed that a national programme of person-centred practice development undertaken in residential care settings for older people was associated with several positive outcomes. These included a decrease in nursing stress, a decrease in the intention to leave the job, an increase in nursing satisfaction, and an increase in organisational commitment. The authors of that study concluded that the care environment is a critical factor in the development of person-centred relationships. Other studies of residential care of older people have shown that residents in units with higher levels of person-centred care were rated to have higher quality of life (Edvardsson *et al.*, 2013, Sjögren *et al.*, 2013). However, further studies investigating relationships between organisational systems, different groups of HCP, and different care environments in relation to person-centred care are needed. It is logical to believe that HCP's stress of conscience is associated with their perception of the care environment.

Rationale

Conscience perceived as an asset might serve as a guide and a motivating factor for providing good care among HCP (Juthberg, 2008, Dahlqvist *et al.*, 2007). On the other hand, conscience perceived as a burden might generate stress of conscience (Glasberg *et al.*, 2007, Juthberg *et al.*, 2007), which can jeopardize well being among HCP (Orrung Wallin *et al.*, 2013) and negatively affect the quality of care they provide (From, 2011). Studies have also shown that stress of conscience is associated with burnout (Juthberg *et al.*, 2008, Glasberg *et al.*, 2007), and there are numerous studies showing that burnout has negative effects on both quality of care and the general organisational well-being. For example, burnout is associated with less patient satisfaction (Aiken *et al.*, 2012), nurses' intention to leave the job (Heinen *et al.*, 2013), nurses' perceptions of lower patient safety (Teng *et al.*, 2010, Halbesleben *et al.*, 2008), reduced performance among HCP, teachers, and other professions (Taris, 2006), negative feelings towards patients among psychiatric staff (Holmqvist, & Jeannue, 2006), nursing aides' vindication of elder abuse (Shiri, & Cohen, 2009), elder abuse by nursing staff (Saveman *et al.*, 1999), and that people with burnout symptoms are avoiding patients and work tasks (Ericson-Lidman, & Strandberg, 2007). Consequently, there can be direct harms associated with burned out HCP

remaining in the workplace and/or experiencing high levels of stress of conscience. We do not need HCP without a conscience nor HCP who are burned out or experiencing high levels of stress of conscience, and at the same time it is desirable to retain experienced HCP in elderly care because the demand for HCP in the care of older people is expected to increase (Kirkevold, Brodtkorb, & Ranhoff, 2010, p. 233). Because no longitudinal studies have been performed (to my knowledge), it is not known if or how stress of conscience and perception of conscience can change over time nor if or how any such changes are associated with burnout, social support and perceptions of the care environment. Furthermore, organisational and situational factors are known to predict burnout (Elder, 2004), and several studies have shown that burnout levels vary between different organisations and different countries (Heinen *et al.*, 2013, You *et al.*, 2013, Aiken *et al.*, 2012). It is known that HCP's work environments vary between different municipalities (Gustafsson, & Szebehely, 2007), and thus it is reasonable to assume that levels of stress of conscience and social support also vary across different municipalities. No comparative studies could be found where HCP's assessments of stress of conscience and social support have been investigated in different organisations for residential care of older people or in organisations located in different municipalities. Furthermore, it is also reasonable to assume that there are many important aspects that can generate troubled conscience among HCP in their daily work. It seems important to identify such aspects and gain a deeper understanding about them. Such knowledge can be used in order to develop measures against the negative aspects of stress of conscience that affect HCP's well-being.

Aim

The overall aim of this thesis was to describe, compare and investigate longitudinal relationships between stress of conscience, perceptions of conscience, burnout, social support and person-centred care among healthcare personnel working in two different organisations for residential care of older people. Furthermore, the aim was to deepen the understanding of some aspects of importance that generate troubled conscience at each of the two organisations. Based on the emerging knowledge from the research programme and the results from studies I and II, important aspects that can generate troubled conscience were shown to be working with guidelines and working during times of downsizing and reorganisation.

Specific aims

Study I. To describe relationships over time between degrees of stress of conscience, perceptions of conscience, burnout scores, and assessments of person-centred climate and social support among healthcare personnel working in municipal care of older people.

Study II. To compare assessments and relationships of stress of conscience, perceptions of conscience, burnout, and social support between healthcare personnel working in two different organisations for care of older people.

Study III. To describe care providers' narrated experiences of guidelines in daily work at a municipal residential care facility for older people.

Study IV. To describe care providers' narrated experiences of working in private residential care for older people during downsizing and reorganisation, focusing on troubled conscience.

Methods

Study designs

To achieve the aims of the studies I-IV both quantitative and qualitative research methods were used. Quantitative methods were used in studies I and II, and a qualitative method was used in studies III and IV. The rationale for using varying methods was to provide a broad and multifaceted insight regarding the study object and to contribute to a deeper understanding of the phenomena under study (cf. Creswell, & Plano-Clark, 2011, pp. 6–9, Polit, & Beck, 2006, pp. 244–249). A description of study designs, samples, data collections, and data analyses in the four studies is shown in Table 1.

Table 1. Overview of study, design, sample, data collection and data analysis. CI: confidence interval; η^2 : eta-squared; RR: Relative risk; PLSR: Partial least square regression; AU p-values: approximately unbiased p-values; χ^2 : chi-squared; h : effect size index; ϕ : phi coefficient; d : Cohen's d ; SCQ: Stress of Conscience questionnaire; PCQ: Perceptions of conscience questionnaire; MBI: Maslach Burnout Inventory; PCCQ: Person-Centred Climate Questionnaire; SocIS: Social Support.

Study	Sample	Data collection, Year	Analyses
I Observational longitudinal cohort study	Questionnaires were posted to all HCP working within a municipality ($n = 983$), and 488 (50%) were returned at baseline. 458 questionnaires were sent at follow-up, excluding 28 that had participated in an intervention, and 277 (60%) questionnaires were returned.	The SCQ The PCQ The MBI The PCCQ The SocIS baseline 2009 and follow-up 2010.	95% CI of paired differences, mean values and 95% CI, η^2 , RR, PLSR.
II Comparative cross-sectional study	Baseline data from study I (see above) ($n_1 = 488$) and all HCP ($n = 167$) working at a private organisation for residential care of older people in which 59% answered the questionnaires ($n_2 = 98$).	The SCQ The PCQ The MBI The SocIS, 2009 (n_1) and 2012 (n_2).	Hierarchical cluster analysis, multiscale bootstrap resampling, AU p-values, χ^2 tests, CI, h , Cramer's V , ϕ , d .
III Qualitative descriptive design	Eight care providers working at a municipal residential care facility for older people.	Interviews that encourage narrative, 2012.	Qualitative content analysis
IV Qualitative descriptive design	Seven care providers working at a private residential care facility for older people.	Interviews that encourage narrative, 2013 and 2014.	Qualitative content analysis

Settings and participants

In studies I and II, the term NAs includes both ENs and NAs because they typically have the same work tasks even though their nursing education usually differs. The term HCP includes RNs, ENs, and NAs in studies I and II.

The term care provider means ENs and NAs in study III. In study IV, the participants only consisted of ENs because there were no NAs among the ordinary staff working at the care unit. Consequently, the term care providers in study IV is equivalent to ENs.

Study I

The participants were all HCP, i.e. RNs and NAs, ($n = 983$) working in all 21 residential care facilities for older people in a municipality in northern Sweden. The participants had a mean age of 50.5 years (range 24–68 years) at baseline, and after one year the corresponding figure was 51.2 years (range 29–67 years). They had worked in healthcare for an average of 20.9 years (range 0.5–45 years) at baseline, and after one year the corresponding figure was 23.4 years (range 2–45 years). They had worked at their current workplaces for an average of 11.4 years (range 0–41 years) at baseline, and after one year the corresponding figure was 13.5 years (range 0.5–41 years). The majority of the participants were women at baseline (95.5%) and after one year (97.8%).

Study II

This study was performed among all HCP, i.e. RNs and NAs, working in residential care of older people at two different organisations. The two organisations were chosen to be as different from each other as possible regarding characteristics of the organisations. One organisation had a public mode of operation ($n = 488$) and the other had a private mode of operation ($n = 98$). Henceforth, the organisations will simply be referred to as the private organisation and the public organisation.

Baseline data from study I was used in this study, the public organisation is thus described above. The HCP working within this organisation can be regarded as culturally homogeneous because 96.0% of them had traditional Swedish first and last names.

The private organisation was located in a large town in the south of Sweden, and the care is officially described as based on Christian values. A large proportion (45%) of the HCP spoke a language other than the Scandinavian languages or English. Thus, the HCP could be regarded as culturally heterogeneous. The participants had a mean age of 49 years (range 28–66 years), and they had worked in healthcare for an average of 20 years (range 3–40 years). The participants had worked at their current workplaces for an average of 11.1 years (range 0.2–40 years). The majority of the participants were women (80.6%).

Study III

The study was conducted at two housing units within one municipal residential care facility for older people with dementia diseases, multiple diseases and extensive disabilities. The residential care facility was randomly selected out of the 21 residential care facilities located in a small town in the north of Sweden to participate in an intervention aiming to find ways to constructively deal with troubled conscience among HCP. At the time of the study, the intervention had never dealt with troubled conscience from working with guidelines. The staffing varied between 0.74 and 0.85 staff members per resident depending on the estimated needs of the residents. Care providers worked continuous shifts with four to six care providers on duty during days (7:00–16:00) and two during the evenings (16:00–21:00) for both units (one unit had 10 residents and the other had 13 residents). A convenient sample of 12 care providers was asked to participate, out of which five ENs and three NAs agreed (mean age = 52 years, range 41–61 years). The majority of the participants were women. The mean time working in healthcare was 23.1 years (range 10–37 years), and the mean time for employment at the present workplace was 10.8 years (range 4–17 years). Four participants worked full-time and four worked part-time (80%–90% of full-time).

Study IV

The study was conducted at a specialist care unit for people with dementia disease. The care unit is one of several care facilities within a private organisation for residential care of older people located in a large city in the south of Sweden. The care unit was subjected to downsizing and reorganisation during the period 2010–2013 due to economic constraints. All staff who worked daytime ($n = 15$) at the care unit were invited to participate, and seven ENs accepted participation (mean age = 52 years, range 40–63 years). The participants all worked part-time (80% of full-time)

with a mean time for employment at the care unit of 14.6 years (range 9–26 years). The majority of the participants were women.

Data collection

Study I

Five different questionnaires, the Stress of Conscience Questionnaire (SCQ), Perceptions of Conscience Questionnaire (PCQ), Maslach Burnout Inventory (MBI), Social support (SocIS), and Person-Centred Climate Questionnaire (PCCQ), were distributed among the HCP. At baseline (October/November 2009), 983 questionnaires and information letters were posted to home addresses, and after two reminders at four and eight weeks 488 (50%) of the questionnaires were returned. After one year (October/November 2010), 458 questionnaires were sent to those HCP who answered at baseline, excluding 28 who had participated in an intervention aimed to assist HCP to constructively deal with troubled conscience and two who were unreachable. Two reminders were sent to home addresses after four and eight weeks, and 277 questionnaires were returned (60%).

Study II

In the private organisation, the data were collected using the SCQ, PCQ, MBI, and SocIS. The questionnaires were posted to the home addresses of 167 HCP during 2012. After two reminders, 98 questionnaires were returned (59%).

The data collection for the public organisation is described above under study I (baseline).

Study III

The participants were chosen because they had mentioned in earlier interviews conducted by JÅ within the research programme that working according to guidelines was something that troubled their conscience without further elaborating on what they meant. The interviews for study III were carried out by JÅ between February and March 2012 and were conducted in a secluded room in a corridor close to the housing units. An interview guide, starting with open-ended questions, was developed and agreed upon within the research team. The care providers were encouraged to freely narrate about guidelines. For instance, 'Please tell me what guidelines you work with at your workplace' and 'What is your experience of

how these affect your daily practice?’ These questions were followed up by probing questions, for example: ‘Please, tell me more’ and ‘So what did you do then?’ In order to encourage progression in the interviews, questions were asked about the origin, purpose and implementation of the guidelines. The interviews were audio recorded and lasted 22–54 minutes with a total length of 5 hours and 25 minutes.

Study IV

The interviews were carried out between December of 2013 and March of 2014 by one of the co-authors (BSC). The interviews took place in a secluded room at the care unit using an interview guide that was developed within the research team. The interviews started with open-ended questions in which the ENs were encouraged to freely narrate about their daily work during times of downsizing and reorganisation. For example, questions like ‘What are your experiences with the changes that have occurred at your workplace recently’ were followed up by more specific questions like ‘If you do not have the time to provide the care you want to provide, do you then get troubled conscience?’ Probing questions were also asked in order to ensure progress in the interviews, for instance, ‘How did that make you feel’ and ‘So what then?’ The interviews were audio recorded and lasted 11–71 minutes for a total length of 5 hours and 28 minutes.

Measurements

The SCQ was used in studies I and II. The questionnaire consists of nine items about various healthcare situations each made up of two parts, an A-question and a B-question. The questions assess situations of ethical difficulty in healthcare in terms of how often they occur (A-questions) and the degree to which they give troubled conscience (B-questions). The A-questions are assessed on a 6-point Likert scale where 0 means “Never” and 5 stands for “Every day”. Each A-question is followed by a B-question where the degree of troubled conscience is assessed on a 10 cm long visual analog scale that runs from 0 = “No, it gives me no troubled conscience at all” to 5 = “Yes, it gives me very troubled conscience”. By multiplying each A-question by its B-question, a measure of stress of conscience is retained, this index, stress of conscience index ranges from 0 to 25 points on each item with a maximum of 225 points for the whole scale. The questionnaire is validated for Swedish conditions (Glasberg *et al.*, 2006 ($\alpha = 0.83$)). Revalidation of the questionnaire showed that the SCQ could be regarded as unidimensional after exclusion of item 6 (Åhlin *et al.*, 2012). A Swedish version of the questionnaire has been used by Glasberg (2007), Juthberg (2008),

Gustafsson (2009), Pellfolk (2010), From (2011), Beck (2013), and Orrung Wallin (2013). A Finnish version of the questionnaire has also been tested and found to be reliable (Saarnio *et al.*, 2012).

The PCQ was used in studies I and II. The questionnaire consists of 16 items, and the perceptions of conscience in terms of its origin, function, and significance are assessed on a 6-point Likert scale where 1 stands for “No, Totally disagree” and 6 stands for “Yes, entirely agree”. The questionnaire was originally validated by Dahlqvist *et al.*, (2007) and ended at that time with 15 items. This Swedish version of the questionnaire has been used by Glasberg (2007), Juthberg (2008), Dahlqvist (2008), and Gustafsson (2009). In the revalidation of the questionnaire, an additional theoretically and empirically important question was tested and found to be statistically significant (Åhlin *et al.*, 2012). This version of the questionnaire was used in studies I and II.

The MBI was used in studies I and II. The questionnaire consists of 22 items and includes the following three subscales: “emotional exhaustion” (EE) (9 statements), “depersonalization” (DP) (5 statements), and “Personal accomplishment” (PA) (8 statements). Respondents assess how often they feel in accordance with a statement by marking on a 7-point scale where 0 means “Never” and 6 means “Daily”. Only the two core factors, EE and DP, were used in the studies. High scores on EE and DP indicate increased risk of burnout, and numeric cut-off points can be used to code the burnout scores as low, average, and high (Maslach *et al.*, 1996). A validated Swedish translation of the questionnaire was used (Hallsten, 1985).

The SocIS was used in studies I and II. The questionnaire focuses on the social and psychological working environment and is used to assess support from co-workers, managers, family, and friends. This questionnaire consists of nine questions and statements about support from immediate managers (3 questions, $\alpha = 0.88$), co-workers (3 questions, $\alpha = 0.77$), and family and friends (3 questions, $\alpha = 0.71$). Responses are marked on a 5-point Likert scale where 1 stands for “Very seldom or never” and 5 stands for “Very often or always”. The questionnaire is validated for Swedish conditions (Dallner *et al.*, 2000), and a Swedish version was used by Nygren (2006) and Gustafsson (2009).

The PCCQ, staff version, was used in study I. The questionnaire is designed to measure the extent to which HCP assess the caring climate as person-centred. Responses are marked on a 6-point Likert scale where 1 stands for “No, I disagree completely” and 6 stands for “Yes, I agree completely”. High values indicate high person-centredness. The questionnaire contains 14

items, and factor analysis of the scale resulted in a 3-factor solution of safety ($\alpha = 0.84$), everydayness ($\alpha = 0.80$), and community ($\alpha = 0.77$). The questionnaire is validated for Swedish conditions (Edvardsson, Sandman, & Rasmussen, 2009).

Data analysis

Study I

All items in the study were investigated with different measures of central tendency and variance. To assess if there were any changes during the year under study based on individual differences, 95% confidence intervals (CIs) of the paired differences (baseline and after one year) were used on all items and the MBI subscales. As an adjustment to account for the large sample size fallacy (cf. Lantz, 2013, Studenmund, 2001, pp. 141–142) and the increasing overall α value due to multiple tests (cf. Anderson, Sweeney, & Williams, 2002, pp. 495–496, Stevens, 2002, pp. 6–9), differences were only regarded as significant when CIs did not contain zero and had a large effect size ($\eta^2 > 0.14$, cf. Cohen, 1988, pp. 284–287). Background variables were analysed with mean values and 95% CIs on all items. When considerable differences were detected (i.e. non-overlapping CIs), relative risks were calculated against the MBI subscales by using the numerical cut-off points to code the scores as low, average, or high. Internal consistencies were estimated by Cronbach's alpha on all questionnaires.

Partial least squares regression (PLSR) with the total SCQ index score (item 6 excluded) as the response variable was used to detect relationships among the variables under study (items in the PCQ, the MBI subscales EE and DP, and the variables in the SocIS) both at baseline and after one year. Item 6 was excluded from the response variable because the total SCQ index score cannot be regarded as unidimensional otherwise (Åhlin *et al.*, 2012). The jack-knife approximate t-tests of regression coefficients were used to evaluate the independent contribution of each item and subscale in explaining the variation in the response variable. Only p -values < 0.001 were regarded as significant as a way to make an adjustment for the problem of multiple tests. The jack-knife 95% CIs around the regression coefficients were also calculated and used for evaluation purposes. The number of components in the PLSR models was selected by examining validation plots for the mean square of prediction, the root mean square of prediction, and the coefficient of multiple determination and by performing leave-one-out cross validation.

Study II

Comparisons between the two organisations were carried out by using various measures of central tendency and variance on all items. A radar chart was produced to facilitate a graphical identification of potentially important differences between the organisations regarding items in the SCQ, PCQ, and SocIS. In order to facilitate the graphical identification, all mean values were rescaled regarding the items in the PCQ and SocIS. To judge the significance of potential differences between the organisations among the continuous items in the SCQ, 95% CIs and the effect size measure Cohen's d were used. Chi-square tests for independence were used to test relationships between the organisations and the non-continuous items in the PCQ (dichotomized into disagreement and agreement), SocIS, and MBI subscales. Differences were only regarded as significant when CIs were non overlapping or p -values were below 0.01 and when effect sizes were at least moderate according to criteria's suggested in the literature $d > 0.5$ and $\varphi > 0.3$ (Cohen, 1988, pp. 24-27, 224-225) and Cramer's $V > 0.2$ (Rea, & Parker, 2005, pp. 189). Hierarchical cluster analysis with multiscale bootstrap resampling for calculation of approximately unbiased (AU) p -values was used to investigate associations between items in the SCQ, PCQ, SocIS, and MBI subscales at the two organisations.

Studies III and IV

Studies III and IV were based on interviews, and a qualitative descriptive design was used. The analyses were performed similarly in both studies. A qualitative research design was chosen because it is a suitable method to use when knowledge of the issue under study is limited (Morse, & Field, 1998). Qualitative content analysis was used to analyse the interviews, as inspired by the method description by Graneheim and Lundman (2004). Qualitative content analysis can be applied to a variety of data and can be used to interpret texts in order to describe narrated experiences (Graneheim, & Lundman, 2004). To begin with, all interviews were transcribed verbatim (except for names and places) with silences, sighs, and laughter marked in the text. The texts were then read and verified against the audio files. The texts were then re-read to obtain a sense of the texts as a whole, and meaning units that were consistent with the aims of the studies were identified, condensed, and coded. Comparisons were made among the coded meaning units with regard to similarities and differences, and meaning units with similar content were sorted into groups. These groups of meaning units were then abstracted into sub-themes and themes. Throughout the analysis process, regular discussions about the results were carried out among the researchers, and all steps in the analysis were discussed in an open and

critical dialogue. Agreements about similarities and differences within and between themes were sought during the analysis, and agreements were reached at the end. The four studies in this thesis have all been discussed in research seminars at the Department of Nursing, Umeå University.

Ethical considerations

Studies I and II took quantitative approaches using questionnaires. Letters consisting of questionnaires and written information about the studies were sent to the participants' home addresses. The written information stated the purpose of the study, that participation was voluntary, and that confidentiality was guaranteed in the presenting of the results.

The personal closeness that occurs in an interview situation requires the researchers to be sensitive when it comes to how far they can go in the questions that are asked (Kvale, & Brinkman, 2009, p. 90). As a researcher, it is important to be aware of the risk that participants might reveal things they later regret as a consequence of the openness and intimacy that often characterizes the interview situation (*ibid.*). Thus, the main issue for the researcher in qualitative research is the researcher–participant relationship in which there is a risk of being too close or too distant (Haahr, Norlyk, & Hall, 2014). The risk that the interviewer–participant relationship will become too close and that the researcher might be seen more as a therapist increases during repeated interviews (*cf.* Haar *et al.*, 2014, Kvale, & Brinkman, 2009, p. 90). The participants in study III had participated in an intervention in which they had worked closely together with researchers from the research programme. Consequently, it was important that the interviews were carried out by a researcher who had not been involved in that intervention. Furthermore, it was important for the interviewers in both studies to be aware of the ethical difficulties of the situations being narrated. Both interviewers made an effort to be sensitive regarding participants' reactions during the interviews. All participants were provided with both verbal and written information that participation was voluntary, that they could stop the interview at any moment without giving any reason, and that they were guaranteed confidentiality in the presenting of the results. All participants gave their informed consent to participate, and all four studies were approved by the regional ethical review board (§ 100, dnr 09-099M).

Results

Study I

The aim of study I was to describe relationships over time between degrees of stress of conscience, perceptions of conscience, burnout scores, and assessments of person-centred climate and social support among HCP working in municipal care of older people. The results showed that HCP's perceptions of conscience, stress of conscience, burnout scores and their assessments of person-centred care climate and social support were stable over the year under study, and there were no significant differences between baseline and follow-up. The PLSR model at baseline showed that 'having to deaden one's conscience in order to keep working in healthcare' (PCQ item 11), 'perceiving one's conscience as far too strict' (PCQ item 12), 'getting a troubled conscience when one cannot live up to one's own standards' (PCQ item 16), 'noticing disturbing conflicts between co-workers' (SocIS item 8), and the MBI-subscales EE and DP were significantly ($p < 0.001$) positively associated with the response variable SCQ (item 6 excluded). The PLSR model produced at the one-year follow-up showed the same positive significant associations, but with the exception of PCQ item 16 that was no longer significant. These results point towards that HCP who perceived their conscience as a burden (PCQ items 11, 12, and 16), who were witnessing disturbing conflict with co-workers (SocIS item 8), and who had high burnout scores on EE and DP also suffered from high levels of stress of conscience.

Items that were significantly negatively associated with the response variable (the SCQ with item 6 excluded) both at baseline and after one year included 'getting support and help from one's immediate superior when needed' (SocIS item 2), 'one's immediate superior is willing to listen to work-related problems if needed' (SocIS item 4), and that 'one's work achievements are appreciated by one's immediate superior' (SocIS item 7) ($p < 0.001$). In addition to these three items, the PCQ item 8 'being able to following one's conscience at work' was also significantly negatively associated with the SCQ in the PLSR model produced after one year ($p < 0.001$), but this item was not significant at baseline. These results points toward that support from superiors (SocIS items 2, 4, and 7) and the perception that one's conscience is an asset (PCQ item 8) were protective elements against stress of conscience.

Due to very low variance among items in the PCCQ, these items did not contribute any explanation to the response variable in the PLSR models. Consequently, the PCCQ items were excluded from the PLSR models. Characteristics such as age, sex, marital status, children living at home, time in healthcare, and time at current workplace showed no significant associations with any of the variables under study. The results showed that HCP working day/shift had higher degrees of stress of conscience and higher burnout scores on the MBI subscales EE and DP compared to those working nights. HCP working day/shift had almost three times as high relative risk (RR) (2.97) to show high burnout scores on the EE and twice as high RR (2.19) on the DP compared to those working nights. ENs had significantly higher levels of stress of conscience at baseline (mean = 13.04, 95% CI: 12.35–13.37) due to ‘lack of time to provide the care the patients need’ (SCQ item 1) compared with RNs (mean = 9.62, 95% CI: 7.54–11.69). ENs continued to show higher levels of stress of conscience on SCQ item 1 after one year compared to RNs, but the difference was no longer significant.

Study II

The aim of study II was to compare assessments and relationships of stress of conscience, perceptions of conscience, burnout, and social support between HCP working in two different organisations for care of older people. The HCP working for the public organisation had significantly higher levels of stress of conscience regarding ‘lack of time to provide the care the residents need’ (SCQ item 1) (mean = 12.63, 95% CI: 11.93–13.26, $d = 0.51$) and ‘are forced to provide care that feels wrong’ (SCQ item 2) (mean = 8.77, 95% CI: 8.16–9.44, $d = 0.52$) compared with HCP working for the private organisation (SCQ item 1 mean = 8.89, 95% CI: 7.38–10.40, and SCQ item 2 mean = 5.16, 95% CI: 3.77–6.54). The HCP working for the private organisation agreed significantly more with the statement ‘God speaks to us through our conscience’ (PCQ item 14) compared to those working for the public organisation ($p < 0.001$, Cramer’s $V = 0.22$), no other significant associations between perception of conscience and organisation were detected. The results showed no significant associations between organisation and social support and the EE and DP subscales of the MBI.

The results of the hierarchical cluster analysis showed that associations between all SCQ items, 'having to deaden one's conscience to keep working in healthcare' (PCQ item 11), EE, and DP were similar between the organisations. These items and factors clustered together in a significant subcluster (AU p-value = .97 for both organisations). The difference between the organisations was that 'my conscience is far too strict' (PCQ item 12) and 'when I cannot live up to the standards I set for myself, I get a troubled conscience' (PCQ item 16) also ended up in the significant subcluster with regard to the public organisation.

There was a higher proportion of men working in the private organisation (18.4%) compared to the public organisation (4.5%, $h = 0.50$). Women had significantly higher levels of stress of conscience compared to men as the results showed non-overlapping 95% CIs regarding 'lack of time to provide the care the residents need' (SCQ item 1) ($d = 0.63$), 'are forced to provide care that feels wrong' (SCQ item 2) ($d = 0.67$), and 'having to deal with incompatible demands in one's work' (SCQ item 3) ($d = 0.67$). The results also showed that men reported more social support from their co-workers compared to women because they scored significantly higher on 'If needed, can you obtain support and help with your work from your co-workers?' (SocIS item 1) ($p < 0.001$, Cramer's $V = 0.20$) and 'If needed, are your co-workers willing to listen to your work-related problems?' (SocIS item 3) ($p < 0.001$, Cramer's $V = 0.22$).

Study III

The aim of study III was to describe care providers' narrated experiences of guidelines in daily work at a municipal residential care facility for older people. In order to facilitate the care providers' narratives, no predefinition of the concept guideline was provided to them and they mentioned legislations, rules, recommendations, national guidelines, and policies as equivalent to guidelines. When freely narrating about guidelines, they mentioned guidelines about safety measures (physical restraints), documentation, food handling, weight control, measuring the care burden, meal arrangements, activities, and person-centred care. Some of these guidelines were mandatory (i.e. based on law), others were non-mandatory (e.g. based on science and/or clinical practice), and some guidelines contained both mandatory and non-mandatory elements. The care providers described how working with such guidelines generated troubled conscience. The overall understanding was revealed as experiences of struggling to do their best, prioritising between arcane guidelines while keeping the residents needs in the foreground. Care providers described experiences of guidelines as coming from above and they expressed a great uncertainty about the

origin of different guidelines. Sometimes they thought that the guidelines came from different institutions, other times they simply stated that they came from above with no further details about their origin. Care providers perceived guidelines as controlling, on the one hand positively, as a way to control and ensure the quality of care and on the other hand perceived negatively, as a way of controlling them. They perceived guidelines as not sufficiently anchored at their workplace, and they described how they did not receive sufficient education about the guidelines and lacked other resources needed in order to work according to guidelines (e.g. to few computers). Care providers also described how guidelines sometimes were implemented simply by 'orders'. They also narrated about how they perceived guidelines as stealing time from residents, they expressed how working according to guidelines took time and thus tore them away from the care of residents (e.g. the guidelines about documentation). They also perceived guidelines as colliding with each other, they described how working according to one guideline sometimes was incompatible with working according to another guideline. For example, they described how residents were not allowed to be in the kitchen and do kitchen chores according to the guideline about food handling. This collided with the guideline about activities as care provider expressed how kitchen chores was a meaningful person-centred activity for some residents. The care providers expressed how they perceived guidelines as lacking practical use and complicating care. For example, they described how a lot of the information they gathered according to the guidelines about documentation was irrelevant and never used in practice. Care providers also described how they perceived guidelines as challenging their judgement as they had to use their own judgement when relating to the guidelines they were expected to work in accordance with. They expressed how they sometimes lacked support from RNs when guidelines made the care more complicated which they perceived as frustrating and an obstacle towards providing the residents with good quality of care. Care providers also described how they sometimes did not work in accordance with guidelines when they felt that the guidelines collided with the residents' needs. In such situations, they had to use their own judgement in order to priority between the guidelines and residents' needs, these priorities were described as exhausting and troubled their conscience.

Study IV

The aim of study IV was to describe care providers' narrated experiences of working in private residential care for older people during downsizing and reorganisation, focusing on troubled conscience. The overall understanding from analysis of the interviews was revealed as perceiving oneself as pinioned in between current circumstances to provide care and what one's

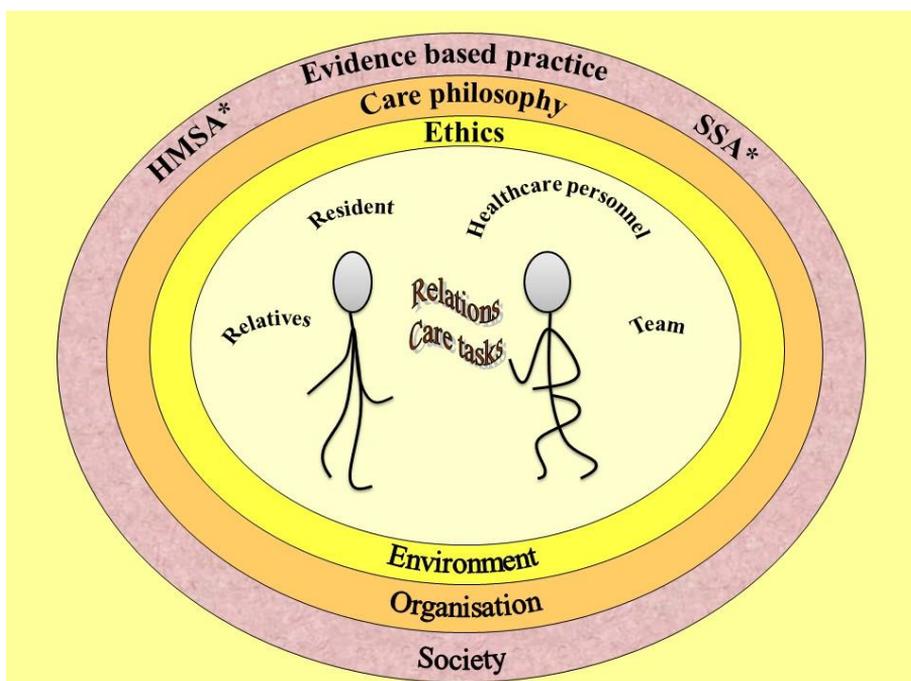
conscience conveys. The care providers described how they perceived a loss of good management during reorganisations. They described how they for a period had a first-line manager who practiced good leadership and who provided them with a sense of safety and strengthened the feeling of belonging to a team where everybody worked to provide the best possible care for the residents and how everything became much calmer at their workplace. However, they described how frequent changes of their first-line managers during the reorganisation process generated feelings of hopelessness, confusion, powerlessness, sadness, and irritation. They expressed how frequent changes and at times the lack of a first-line manager made it difficult to know to whom they should turn with regard to their work, and it was difficult to make plans and to develop a functional workplace. The care providers also expressed a great dissatisfaction with the head management due to the frequent changes of their first-line managers, lack of information from the management, all of the deteriorations from the cutbacks, and a lack of recognition. The care providers described how they perceived changed working conditions as exhausting and activating their conscience. They also described how downsizing had changed their working conditions, which had a negative impact on their own health both physically and psychologically mainly from increased time pressure that made their work climate more stressful. They also expressed how downsizing and reorganisation were triggering their conscience as their conscience became troubled about their own and others shortcomings and how important it was to follow one's conscience and how it served as an asset during times of downsizing. The care providers described how important it was to express what conscience tells them for the sake of the residents even when their managers or co-workers disagreed. They also experienced troubled conscience when working conditions decreased the quality of care, for example, when the increased time pressure sometimes meant that they did not have the time to help residents with tasks such as showering, shaving, dental visits.

Discussion

The overall aim of this thesis was to describe, compare and investigate longitudinal relationships between stress of conscience, perceptions of conscience, burnout, social support and person-centred care among healthcare personnel working in two different organisations for residential care of older people. Furthermore, the aim was to deepen the understanding of some aspects of importance that generate troubled conscience at each of the two organisations. Based on the emerging knowledge from the research programme and the results from studies I and II, important aspects that can generate troubled conscience were shown to be working with guidelines and working during times of downsizing and reorganisation.

In order to deepen the understanding of the results in this thesis, the results will be discussed in relation to a nursing care model (Figure 1) that has been developed at the Department of Nursing at Umeå University (Norberg, & Atlin, 1987, Norberg, & Ternstedt, 2009 pp. 31–32) and used by (Ekman, Norberg, & Swedberg, 2014 p. 74, Beck, 2013 pp. 13–14, Orrung Wallin, 2013 pp. 28–29). Nursing always occurs in a particular society at a particular time, and this particular model adopts a societal perspective and shows that there are numerous aspects that influence the nursing care. The different aspects shown in the model (figure 1) are all closely related to each other and should be seen as a whole. The model states that nursing is understood from a relational aspect and a care task aspect that are intertwined into an inseparable whole. In the context of the patient/resident–HCP relationship, various care tasks are performed that can be regarded as promoting, preventing, curing, relieving, and comforting. The model states that the values that exist at the macro level (society)—and that are expressed in various laws and in regulatory documents regarding healthcare—affect how healthcare is organized at the meso-level (organisation) and the encounter between persons at a micro level (environment), for example, the encounter between HCP and patients (Norberg, & Ternstedt, 2009 p. 31, 34–35). In the discussion below, the different aspects from the nursing model will be highlighted in italics for clarifications.

Figure 1. A model of nursing care and interacting aspects. Modified and translated after Norberg and Ternstedt (2009 pp. 31-32). *HMSA: Health and Medical Services Act, SSA: Social Services Act.



Associations between stress of conscience, perceptions of conscience, burnout, and social support

No studies among HCP in residential care of older people in Sweden could be found that have shown higher degrees of stress of conscience than the results from studies I and II. The overall mean values of the SCQ-index were 61.0 (63.9 at follow-up) for the public organisation in study I and 47.1 for the private organisation in study II. These are notably higher figures compared to other studies in similar settings where the SCQ-index has been reported to be 24.0 (Edvardsson, Sandman, & Borell, 2014), 27.3 (Orrung Wallin *et al.*, 2013), 37.24 (From, 2011), and 45.6 (Juthberg, 2008).

Using the model of nursing care mentioned above, the high figures of stress of conscience reported in this thesis might partly be explained as consequences of changes in society (*macro level*) that have had effects on

how the residential care of older people is organized at the two organisations that were the focus of this thesis (*meso level*). This in turn affects the levels of stress of conscience among the HCP working in the organisations (*micro level*), and it is reasonable to assume that this affects their *relations* with the *residents*, with the residents' *relatives*, and with their co-workers on the work *team*. Today there is a consensus among working-life researchers that there have been significant changes in society in recent decades that have strongly influenced the workplace. During the economic crisis in Sweden in the 1990s, there were increased demands for efficiency in both private and public organisations (Börnfeldt, 2009, pp. 122–123). The response to these demands for economic efficiency in the public sector was the neo-liberal reform movement called New Public Management (Meagher, & Szebehely, 2013, Stolt, Blomqvist, & Winblad, 2011, Almqvist, 2006), where the idea has been to reduce spending in the public sector for instance through increased competition (Szebehely, 2011, p. 216, Börnfeldt, 2009, pp. 128–131, Almqvist, 2006, pp. 25–28).

There is a lack of statistical data and studies available in order to determine with certainty what impact this development has had in Swedish care of older people (NBHW, 2004, p. 61). However, based on available data and studies the NBHW concluded that the results points toward that increased competition among organisations for care of older people has not reduced costs (NBHW, 2004, p. 8). Furthermore, the economic restraints that Swedish society was subjected to during the 1990s resulted in deteriorated working environments and increased work-related stress. Towards the end of the 1990s, women employed by the county councils and municipalities (mostly HCP) reported low control of their work, and at the same time they reported increased demands at their work (Theorell, 2006, pp. 7–21). During this time, the number of people on sick leave due to stress-related mental ill health (e.g. burnout) increased, and this was often as a consequence of excessive work-related stress (NBHW, 2003, pp. 7–12). This relationship between work stress and mental ill health has been scientifically established, and HCP were among those who seemed to suffer the most from this development (*ibid.*). Furthermore, a statistically significant relationship has been shown between staff reductions in the county councils (mostly HCP) during the 1990s and sick leave rates five years later due to mental ill health among those who remained employed (Åsberg, & Nygren, 2012, p. 6). Between 1997 and 2003, the number of people on long-term sick leave due to mental ill health increased substantially, but later decreased between 2005 and 2009 (Social Insurance Office, [SIO] 2010). However, those numbers have begun to rise again between 2009 and 2012, and the number is now almost the same as in 2005 (SIO, 2013¹). People who work in health

care, education, and social care are at higher risk to take sick leave due to a psychiatric diagnosis compared to those in other professions (SIO, 2013²).

One reflection is that the high levels of stress of conscience found in this thesis might partly be explained as a consequence of this development in *society* described above. The burdensome experiences described by the care providers in study IV can partly explain the high levels of stress of conscience reported in study II as they worked in the same private organisation. The HCP in study II who worked in the private organisation for residential care of older people had undergone several changes mainly depending on economical restrictions with downsizing and reorganisation as consequences. The economic restrictions had likely been imposed on the *organisation (meso level)* from *society (macro level)* as a consequence of increased competition (see above). The results in study IV show how the *relations* between care providers working in that organisation and residents (*micro level*) can be affected by such changes. The care providers described how the changes made their working conditions more stressful and how they perceived troubled conscience when changed working conditions was perceived to decrease the quality of care. For example, the care providers described how they sometimes did not have the time to help residents with showering, shaving, dental visits or to offer them “silver lining in life” due to the increasingly stressful work environment that resulted from downsizing and reorganisation. Such issues generated feelings of inadequacy, frustration, irritation, anger, and troubled conscience. Consequently, the troubled conscience the care providers expressed as generated from the increasingly stressful work environment can partly explain the high levels of stress of conscience reported in study II.

It can be problematic if the care of older people in Sweden at *the macro* and *meso level* is organized in such a way that HCP self-report such high levels of stress of conscience and burnout at the *micro level* as reported in this thesis. This can have severe consequences for the residents as studies have shown that stress of conscience and burnout are negatively associated with the quality of care (*micro level*) (cf. Schmidt, *et al.*, 2014, From, 2011, Peterson, 2008). Furthermore, given the demographic situation in Sweden (*macro level*), it becomes increasingly important that experienced HCP are able to stay healthy and to keep working at their workplaces (*micro level*). Numerous studies have shown that high burnout levels are an important predictor of nurses' intention to leave their jobs (e.g. Rudman, Gustavsson, & Hultell, 2014, Heinen *et al.*, 2013, Leiter, & Maslach, 2009). It is known that more women working in healthcare are on sick leave from their jobs and that more women are forced to end their work life early due to health reasons compared to men (SWEA, 2014²). The results from this thesis have shown

that burnout is associated with stress of conscience (studies I and II), and results of previous studies have shown that high levels of stress of conscience can threaten the well-being of HCP (cf. Orrung Wallin *et al.*, 2013.) Consequently, it is logical to assume that the high levels of stress of conscience and burnout scores reported in this thesis can be associated with an increased risk that the HCP will finish their working life early due to health reasons or can be associated with increased intention to leave the profession. This can have severe consequences for the residents as experienced HCP are likely to be of importance in providing high-quality of care.

The results from study I showed that HCP who perceived their conscience as a burden, who were witnessing disturbing conflicts with co-workers, and who had high burnout scores on EE and DP also suffered from high levels of stress of conscience. These results are consistent with previous results that have shown that there are positive associations between stress of conscience and burnout (i.e. EE and DP) (Juthberg *et al.*, 2008) and that perceiving one's conscience as a burden is positively associated with burnout (Glasberg *et al.*, 2007, Juthberg *et al.*, 2008.) and stress of conscience (Glasberg *et al.*, 2007, Juthberg *et al.*, 2007). The results from study II confirmed that there are associations between stress of conscience, perceiving one's conscience as a burden, EE, and DP, and that these associations are similar despite great differences regarding characteristics of the organisations investigated in that study. However, there were some significant differences between the organisations regarding levels of stress of conscience. The HCP working in the public organisation reported higher levels of stress of conscience regarding 'lack of time to provide the care the residents need' (SCQ item 1) and 'are forced to provide care that feels wrong' (SCQ item 2) compared to those working in the private organisation. These differences can partly be explained by the higher proportion of men working in the private organisation (18.4%) compared to the public organisation (4.5%). The results showed that differences were larger between men and women than between the organisations regarding stress of conscience (SCQ items 1 and 2). These differences between men and women can partly be explained by the fact that women reported having less support and help with their work from their co-workers (SocIS item 1). This can be one explanation for why women reported higher degrees of stress of conscience from lack of time to provide residents with the care they need. In addition, women also reported having significantly fewer opportunities to talk about work-related problems with co-workers who are willing to listen (SocIS item 3) compared to men. One reflection is that stress of conscience from being forced to provide care that feels wrong can sometimes be generated because one's conscience is fallible and needs to be informed and educated with the help of others

(Ratzinger, 2007, pp. 27, 51, 62). For example, in one study care providers expressed how troubled conscience was generated from their perceived shortcomings about not providing sufficient activities for residents (Ericson-Lidman, & Strandberg, 2013²). Those results showed that by sharing their experiences with each other and with the researchers, the care providers became aware of what a meaningful activity can be and that they were already performing such activities. Thus their consciences were relieved (ibid.). In other words, having opportunities to discuss with co-workers might provide HCP with the education and information they need in order to relieve their troubled conscience. Consequently, one possible explanation for why women reported higher degrees of stress of conscience from being forced to provide care that feels wrong compared to men might be that they had fewer opportunities to talk about work-related problems with their co-workers.

The differences between men and women regarding stress of conscience and social support might also be explained by the establishment of gender roles and social norms. Results have shown that gender moderates the association between emotional dissonance (i.e. faking emotional displays such as smiling when angry) and EE as the association became more pronounced as the percentage of women in a sample increased (Kenworthy *et al.*, 2014). Kenworthy and co-authors' hypothesis was that this association between emotional dissonance and emotional exhaustion had a stronger adverse effect on women because of their gender role. They suggested that women's gender role means that they often make efforts to express positive emotions that are not felt. The authors continued by concluding that this can be more burdensome than suppressing the expression of felt emotions, which is more commonly associated with men's gender role (ibid.). Furthermore, results have shown that women have a greater dependence upon social support for their psychological well-being (Flaherty, & Richman, 1989). Consequently, one potential explanation for the differences regarding social support could be due to different gender roles and the potential different needs of support. The results from this thesis emphasize that sex/gender can be of importance in relation to stress of conscience and that it is possible that men and women need different types of support when experiencing stress of conscience. Further studies are needed in order to elaborate upon this issue. It also seems important to further investigate relationships between organisational characteristics such as size, mode of operation, geographical location (north, south, small town, large town, etc.) and their potential associations with levels of stress of conscience. Additionally it seems important to investigate how changes at the *macro level* might influence levels of stress of conscience among HCP (*micro level*). In other words, it seems important to perform longitudinal studies using multilevel modelling techniques over a relatively

long time period that include a sufficient number of organisations in order to gain knowledge regarding these issues.

Guidelines

The results from this thesis indicate that working with guidelines in municipal residential care of older people can be a burdensome issue for care providers. An overall understanding of the care providers' narrated experiences of guidelines in daily work was revealed as struggling to do their best; prioritising between arcane guidelines while keeping the residents' needs in the foreground (study III). No other studies found have described care providers' narrated experiences of guidelines in daily work in such detail.

In Scandinavia, clinical practice guidelines have been used since the late 1980s (Tan, 2006). Guidelines are described to be used as a way to promote high-quality healthcare based on evidence, to reduce inappropriate variations in practice (Thomas *et al.*, 2009), to ensure cost-efficiency, to educate individuals or groups, and to reduce the risk of legal liability for negligent care (Tan, 2006). Concerns have been raised, however, that guidelines can sometimes provide wrong recommendations, have excessive focus on cost-containment, and can be too "cookbook" and not take into consideration the special needs of individual persons (*ibid.*). Despite these potential disadvantages with guidelines, the potential advantages with them is promising. Consequently, it is not surprising that the development of clinical guidelines for medical staff, nursing staff, and other healthcare professionals is increasing (cf. Francke *et al.*, 2008). Some of the guidelines mentioned by the care providers in study III were non-mandatory (e.g. based on science and/or clinical practice), while others were mandatory (i.e. based on law) and some guidelines contained both non-mandatory and mandatory elements.

At the *macro level*, there are two main laws governing HCP's daily work in municipal care of older people in Sweden: the Social Service Act (SFS:2001:453) and the Health and Medical Services Act (SFS: 1982:763). Based on these two laws and other laws/regulations, the National Board of Health and Welfare (NBHW) specify true regulations and general recommendations of how the care of older people is to be conducted. In addition to these regulations and general recommendations, the NBHW produces national guidelines that HCP working in care of older people must relate to at their workplace. The aim of these guidelines is to ensure uniformly high standards of medical care and social services and to help decision-makers to allocate resources in order to achieve maximum possible

benefit (NBHW, 2015). Furthermore, the trend in Sweden has been to develop control and information systems with the intention to increase the amount of aspects to control – i.e. to increase the potential to exert management (cf. Ahlbäck, Öberg, & Widmalm, 2013, pp. 142–143, Almqvist, 2006, pp. 16–18). This development has been criticized for leading to conflicts between professions ideals and ethics (*micro level*) and what is actually rewarded by the system (*macro/meso levels*), and that control has become more important in the public sector than the production of public services (Ahlbäck, *et al.*, 2013, pp. 142–143). Research has also shown that there is some evidence that the development has gone in that direction. Forsell and Ivarsson concluded that all available studies and investigations point toward that administrative work tasks are increasing and that more working hours are spent on performing such tasks instead of the “usally” or “regularly” work tasks (2014). For example, it has been shown that physicians and nurses produce information that they perceive has no practical use in the care of patients and that they sometimes spend no more than half of their working hours in meetings with their patients (Forsell, & Ivarsson, 2014 pp. 111–134). The results from this thesis (study III) are consistent with this development. Care providers expressed how the guidelines about documentation was coming from above (*macro/meso level*) and was perceived as controlling, stealing time from residents, and as lacking practical use and complicating care at the *micro level*. They described how some things they had to document were only used in order to prove things, i.e. to control that different procedures had been carried out. They expressed how a lot of the information they were supposed to gather was neither relevant nor used in practice and how time-consuming documentation tore them away from the care of residents. It seems problematic if care providers perceive that guidelines make it more important to meet various administrative requirements coming from the *macro/meso levels* rather than helping the residents at the *micro level*. The *relations* between care providers and residents can become difficult if care providers are increasingly spending time performing administrative work tasks instead of spending time with *residents*. One reflection is that the care providers experienced how guidelines meant that they had to perform an increasing number of work tasks that they considered to be outside their professional role, which have been referred to as “illegitimate tasks” within the field of psychology.

Professionals are subjected to illegitimate tasks when they are assigned work tasks that are not considered to be a core element of their professional role or their professional identity (Semmer *et al.*, 2010, Semmer *et al.*, 2007). These illegitimate tasks refer to assignments that are perceived as either unreasonable (e.g. tasks that should be performed by someone else) or

unnecessary (i.e. tasks that should not have to be carried out at all) (Semmer *et al.*, 2010, Semmer *et al.*, 2007). It has been shown that illegitimate tasks is a stressor not contained in other stressor constructs, that explain unique variance in indicators of well-being (Semmer *et al.*, 2007). Furthermore, results have shown that physicians in Sweden who reported that they often had to perform illegitimate tasks had a five-fold increased risk of having high burnout scores from EE (Aronsson, Bejerot, & Härenstam, 2012). The results from this thesis indicate that working according to guidelines that can be perceived as illegitimate tasks by care providers might jeopardize their wellbeing. The care providers described how they experienced feelings of frustration, troubled conscience, uncertainty, and exhaustion when working according to guidelines that they perceived as subjecting them to contradictory demands by having to perform illegitimate tasks with no obvious benefits for the residents and their *relation* to them. These experiences might partly explain the high levels of stress of conscience shown in this thesis (study I) but may also partly be explained by poorly implementation strategies.

Results have shown that it is important to include all staff members in the process of implementing guidelines (Bahtsevani *et al.*, 2010) and to involve care providers in identifying the need for guidelines (cf. NBHW, 2012⁴). In this thesis, however, the care providers described how they were not involved in the implementation process. They expressed how guidelines were sometimes implemented simply by “orders” from the *meso level* with no further explanation of the guidelines’ purpose or how they should/could work in accordance with the guidelines on the *micro level*. Education seems to be another key issue for successful implementation of guidelines. Results from numerous systematic reviews regarding implementation of clinical practice guidelines show that adequate education can be an important factor for practice change (Grimshaw *et al.*, 2004, Miller, & Kearney, 2004, Richens, Rycroft-Malone, & Morrell, 2004, Davis, & Taylor-Vaisey, 1997). The results from this thesis revealed that care providers perceived that they had received insufficient education about the guidelines. Studies have also shown that support from nursing leadership and managers is another important factor that can facilitate the implementation of guidelines (Sandström *et al.*, 2011, Gunningberg *et al.*, 2010, Ploeg *et al.*, 2007). In this thesis care providers described how they lacked support from their RNs when guidelines collided, i.e. working according to one guideline was incongruent with working according to another guideline. They also described how they were on their own to prioritize between resident’s needs and working according to guidelines that they perceived as very exhausting and that troubled their conscience. Studies have also shown that sufficient time and resources can be important factors in facilitating the

implementation of guidelines (Ploeg *et al.*, 2007, Miller, & Kearney, 2004). Care providers described how they perceived guidelines as stealing time from residents and how guidelines were implemented at times when the workload was already too heavy. They also expressed how they were lacking sufficient numbers of computers and how they lacked resources to work in accordance with the guidelines about food handling. In other words, they described how lack of time and resources was an obstacle to working in accordance with guidelines.

The lack of involvement, lack of education, and lack of support from management and RNs together with lack of time and resources can also be an explanation for why the care providers in this thesis often seemed to interpret guidelines as being more dogmatic than they really are and as colliding with each other. One example of many is the guideline about food handling. According to the care providers' narratives, the guidelines about food handling stated that only care providers were allowed to be in the kitchen and to do kitchen chores. That guideline does not explicitly state that residents are forbidden to help out with kitchen chores or to be in the kitchen (Swedish Association of Local Authorities and Regions, [SALAR] 2009). On the contrary, the National Food Agency (NFA) recognizes the importance of letting residents help out with kitchen chores as long as the food is safe from a hygienic standpoint (NFA, 2015). The guideline about food handling was also described as colliding with the guideline about activities. One reflection is that there seems to be a lack of a comprehensive view during the development and implementation of guidelines. Research and implementation of guidelines often focuses on improving only one specific aspect of care with little attention spent on the whole (e.g. Carhart, & Salzman, 2014, Bennett *et al.*, 2012, Pedersen, Tewes, & Bjerrum, 2012). This can lead to what has been called 'drainpipe' problems within economic research (cf. Ramberg, & Ekelund, 2011, Arman, 2007). Each guideline can be viewed as a drainpipe that is so focused on its own specific aspect of care that the whole is lost, and thus different guidelines can collide with each other. In order to prevent drainpipe problems at the *micro level*, it seems important that those responsible at *macro/meso levels* consider this problem prior to implementation, considering each guideline in relation to the whole, and adapt the guidelines to the reality of daily practice. The consideration of adequate implementation strategies prior to introducing guidelines in daily practice might also help care providers become more motivated and to work more constructively with the guidelines at *the micro level* and might prevent dogmatic interpretations. Dogmatic interpretations can have consequences in the *relations* between residents and care providers, for instance, interpretations that residents are not allowed to participate in kitchen chores which can be a good person-centred activity.

Protective factors

Both the quantitative and qualitative results in the studies of this thesis indicate that leadership is important in order to relieve burdensome experiences of troubled conscience. The results from this thesis (study I) showed that support from one's immediate superior was negatively associated with stress of conscience, and this indicates that support from superiors can be an important protecting factor against stress of conscience. In the qualitative studies (studies III and IV), the care providers expressed how important it was to have attendant leaders who could support and help them in their daily work. For example, they expressed how the presence of well-functioning leadership provided them with a sense of safety and made everything much calmer at their workplace (study IV). They also talked about how an attendant and supportive leader strengthened their feeling of belonging to a team where everybody worked to provide the best possible care for the residents. This is consistent with previous studies that have shown that leadership is vital for improving team effectiveness (Kalisch, Weaver, & Salas, 2009, Kozlowski, & Ilgen, 2006) and to uphold the quality of care (Scott-Cawiezell, 2005). The care providers also described how they perceived a loss of good management during downsizing and reorganisation and how this generated feelings of hopelessness, confusion, powerlessness, sadness, and irritation. The care providers talked about how hard it became to make plans and to develop a functional workplace. They described how the increased time pressure from downsizing and reorganization meant that they sometimes lacked time to perform all the care tasks that they believed they should perform. They described this as burdensome and as generating feelings of inadequacy, frustration, irritation, anger and troubled conscience (study IV).

There are numerous studies available that have shown the importance of leadership with regard to the well-being of employees. For example, a systematic review based on approximately 30 years of empirical research concluded that positive leader behaviours (i.e. support, empowerment, and consideration) were associated with high employee affective well-being and a low degree of employee stress (Skakon *et al.*, 2010). Thus, it seems important to organize the residential care of older people at the *macro* and *meso* levels in such a way that RNs and managers can be more present in the daily work closer to the residents. Attendant and supportive leaders can improve the work within *teams* and uphold the quality of the *care tasks* performed by care providers. It also seems important to have attendant leaders who can help care providers make their priorities in daily practice. This regardless if the priorities are between working according to guidelines and residents' needs or when care providers feel they have to de-prioritize

different work tasks due to a lack of time. At the *micro level*, the presence of attendant and supportive leaders might mean that care providers can prioritize more constructively, and this can benefit the *relations* with residents and the quality of the *care tasks* performed. At the *micro level* this might relieve feelings of exhaustion, frustration, troubled conscience, etc. among the care providers and thus be beneficial for their well-being and, by extension, their *relations* with *relatives*, their *team* and *residents*.

The descriptions of lack of support from RNs in daily work can partly be explained by how the organisations of residential care of older people are organized. A major change (*macro level*) in how the care of older people is organized occurred in 1992 when the Elderly Reform Act was implemented (Larsson, & Szebehely, 2006, pp. 413–414). This led to changes in RNs' professional roles (Tunedal, & Fagerberg, 2001), for example, that RNs should be responsible for the medical care of more residents that were increasingly ill (*meso level*) (Harder *et al.*, 2000, p. 22). This change meant that RNs working in residential care of older people today have more of a consultative role and are more distant from care providers and residents (*micro level*) (cf. Juthberg, 2008, Karlsson, 2007). Consequently, this way of organizing residential care of older people limits RNs' opportunities to be attendant when care providers have to make their priorities and needs help in the daily care of residents (*micro level*). Furthermore, managers in residential care of older people recognize the great importance of attendant leadership, but the conditions to exercise it can be difficult (Hjalmarson, Norman, & Trydegård, 2004). Managers have described how they often have an overwhelming workload that can lead to health problems and exhaustion (*ibid.*). Consequently, managers can often be in a difficult position that makes it challenging for them to be present in the daily care of residents at the *micro level*. It seems important to organize the care of older people in such a way that RNs and managers can be closer to care providers and residents and thus have opportunities to provide the kind of support that care providers requested to the *team* in studies III and IV.

The results from this thesis showed that it is important for HCP to follow and express what their conscience tells them in order to relieve burdensome experiences of troubled conscience. The results showed that being able to follow one's conscience at work was significantly negatively associated with stress of conscience, thus indicating that following one's conscience can be an important protecting factor against stress of conscience (study I). The qualitative results showed how care providers described the importance of following one's conscience and prioritising the residents' needs and desires over working according to the guidelines (study III). The care providers also

described how important it was to follow one's conscience and express what one's conscience tells for the sake of the residents even if their managers or co-workers disagreed (study IV). Furthermore, it has been shown that sharing and reflecting with others on difficult situations that generate troubled conscience can be helpful for care providers to constructively deal with troubled conscience and increase the quality of care they provide (Ericson-Lidman, & Strandberg, 2014^{1,2}, Ericson-Lidman, & Strandberg, 2013^{1,2}). Results have also shown that care providers need support from RNs and managers in order to facilitate and encourage sharing and reflection on their troubled conscience (Ericson-Lidman, & Strandberg, 2014¹). One reflection is, that in order to relieve HCP's burdensome experiences of troubled conscience generated by the difficult situations at the *micro level* described in this thesis it can be important to provide HCP with opportunities to share what their conscience tells them and knowing together. Support from RNs and managers is likely of importance regarding this issue. This might be another important strategy that can relieve HCP's troubled conscience and thus decrease levels of stress of conscience and, by extension, improve the quality of both the *relation* with residents and the *care tasks* performed.

Methodological considerations

The quantitative studies

Studies I and II were based on quantitative approaches. Many associations and differences between items were explored in both studies, and thus there was a need to take measures against the increased risk of making a type 1 error as the overall α increases when conducting multiple tests (cf. Dawson, & Trapp, 2004, p. 341, Anderson *et al.*, 2002, pp. 495–496, Stevens, 2002, pp. 6–9). Another potential problem that could be present, especially in study I, is the problem known as the large sample size fallacy (cf. Lantz, 2013, Studenmund, 2001, pp. 141–142). Measures against these two potential problems were to use CIs, to use more conservative levels of significance, and to take the effect size into consideration as recommended (cf. Lantz, 2013, Anderson *et al.*, 2002, p. 495, Stevens, 2002, pp.9–10). It should be noted that taking such measures increases the risk of making a type 2 error (Anderson *et al.*, 2002, pp. 495–496). This increased risk of making a type 2 error, and the small number of men that made the margins of error relatively large in the CIs in study I, might explain the lack of significant differences between men and women on the two first items in the SCQ despite relatively large effect sizes. Besides this example from study I,

the effect sizes were low for the non-significant differences and associations investigated in study I.

There are two major reasons why PLSR was used to investigate relationships between the SCQ, PCQ, EE, DP, and SocIS in study I. The first was the fact that some of the variables were relatively highly correlated with each other. First-generation regression techniques require rather limited co-variance values in the independent variable set in order to produce stable regression models. This can have severe consequences because unstable models can easily be misinterpreted and conclusions can be misleading (cf. Munro, 2005, pp. 287–288, Stevens, 2002, pp. 91–93, Studenmund, 2001, pp. 85, 243–255). PLSR is quite robust with regard to such inadequacies (Haenlein, & Kaplan, 2004) and should, therefore, be more reliable than first-generation regression techniques. The second reason why PLSR was used in study I was because it was desirable to conduct the analysis on an item level instead of on a factor level. The reason for this was that analysis on a factor level could lead to loss of important information because observations are treated as equal when they in fact are not. In other words, the importance of each item is not investigated when conducting analyses on a factor level. First-generation regression techniques perform poorly as the number of variables increases, and having too small sample sizes in relation to the number of variables often leads to overoptimistic models (Babyak, 2004) and unreliable results (Babyak, 2004, Stevens, 2002, p. 12). Fortunately, PLSR performs well with many variables and small sample sizes (Haenlein, & Kaplan, 2004), thus PLSR made it possible for us to perform the statistical analysis on an item level. In addition to the two advantages mentioned above, PLSR also has the advantages that it involves no distributional assumptions, it works with nominal, ordinal, and interval-scaled variables, and it is robust even when variables are skewed and when there are misspecifications of the structural model (Haenlein, & Kaplan, 2004). To sum up, PLSR made it possible to gain knowledge about the importance of each item in the questionnaires and MBI-subscales and their positive or negative associations to the SCQ.

Hierarchical cluster analysis with multiscale bootstrap resampling was used in study II to compare the relationships between all items in the questionnaires and the MBI subscales. Just as in study 1, it was desirable to explore which items belonged together instead of conducting analysis on a factor level (see above). The co-variance values were relatively high between some of the items, so it was not possible to use any first-generation regression techniques (see above). The purpose of cluster analysis is often explorative in order to find patterns and to structure complex data sets (Johnson, & Wichern, 2007, pp. 671-695). Thus, cluster analysis made it

possible to explore which items belonged together in the relatively complex dataset (i.e. many items). Furthermore, cluster analysis can be used with data on a nominal, ordinal, and interval scale (Hastie, Tibshirani, & Friedman, 2009, p. 504), and high co-variance values should also not be a problem in cluster analysis as co-variance values are needed in the distance measures (cf. Johnson, & Wichern, 2007, pp. 671–695). The critique against cluster analysis that is often raised is that cluster analysis always will produce a result and that the results will vary depending on what cluster algorithm and distance measure are used (cf. Djurfeldt, & Barmark, 2009, p. 77, Johnson, & Wichern, 2007, pp. 695). Fortunately, a recently developed bootstrapping technique free from model specification has been developed that is useful in dealing with this potential problem (cf. Shimodaira, 2004). This technique is known as multiscale bootstrap resampling for calculation of AU p-values that can be used to judge the accuracy of clusters or, in other words, the certainty of the existence of a cluster (Suzuki, & Shimodaira, 2004). Multiscale bootstrap resampling for calculation of AU p-values was used alongside with the more traditional way of judging the accuracy of clusters, i.e. using various distance measures and clustering methods to test the stability of the clusters, as recommended (Johnson, & Wichern, 2007, pp. 695). In addition to these measures, the results were also validated through replication because the significant sub-cluster was stable in two different samples (the two organisations), and the results were consistent with the results from the PLSR models in study 1.

The response rates reported in this thesis are a cause for concern and indicate that there is a potential problem with non-response bias threatening the external validity. Because the characteristics of the non-respondents are unknown, it is not possible to deduce the nature of any potential non-response bias. However, results have shown that non-respondents had 20%–30% higher sickness-absence levels compared to respondents (Martikainen *et al.*, 2007). Thus, it is possible that the HCP with the highest levels of stress of conscience and highest burnout scores are those who declined to participate in the studies. However, the analysis in study I contradicts this notion because there were no differences regarding levels of stress of conscience and burnout scores among those who participated only at baseline and those who participated both at baseline and at follow-up. To my knowledge, the levels of stress of conscience in both quantitative studies are the highest ever reported in Sweden. This indicates that non-response bias due to high levels of stress of conscience among the non-respondents should not be as important as one might initially assume. Furthermore, the response rates reported in this thesis, 50% for the public organisation and 59% for the private organisation, are quite reasonable to expect in postal surveys among HCP. Results from a study in which 350 studies were

included in the analysis, showed that the mean response rate in postal surveys was 56% among healthcare professionals (Cook, Dickinson, & Eccles, 2009). The authors concluded that not only are response rates low in postal surveys of healthcare professionals, they are also declining (*ibid.*). The response rate at follow-up in study I was 29% of the original sample (excluding the 28 who had participated in the intervention mentioned earlier), and this is within the range of what can reasonably be expected in longitudinal studies. Taris investigated response rates of 19 longitudinal studies published in two high-impact journals in organisation and management science in 2011 (Taris, 2013, pp. 28-29). The average overall initial response rate in the studies was 58%, and the average response rate at the endpoints was 29%. Taris concluded that during longitudinal studies approximately 50% of the participants are lost, and a response rate of 30% at the endpoint of a longitudinal study is reasonable (*ibid.*).

An additional threat to the external validity is that the samples were chosen to be as different as possible from each other with regard to the characteristics of the organisations. There was little control over the representativeness of the two samples to the population. In residential care of older people in Sweden, the HCP consisted of approximately 9% men and 91% women in 2012 (Wondmeneh, 2013). The relatively low percentage of men in the public organization (4.5%) might mean that the transferability of the results are limited regarding organisations with more men. This is because the results in this thesis show that women report higher degrees of stress of conscience than men. The transferability of the results from the private organization might be limited regarding organizations not characterized by downsizing and reorganization because levels of stress of conscience and burnout are likely to be higher during times of reorganisation. The relatively high percentage of men in the public organization (18.4%) can mean that the transferability of the results are limited regarding organisations with less men. Organisations subjected to reorganization with fewer men working there might mean that levels of stress of conscience are higher than the levels reported in this thesis.

One advantage to using both quantitative and qualitative data is that results from one approach can be greatly enhanced by a second source of data (*cf.* Creswell, & Plano Clark, 2011, pp. 8-14.). A typical situation when mixed methods are used is when quantitative data require an explanation as to what it means. In such a situation, qualitative data can be useful to gain a more detailed understanding (*ibid.*). In this thesis, the qualitative results have been used in such a manner. This is an advantage as a deeper understanding about the quantitative results was gained from the qualitative results. There are numerous examples in the qualitative studies (studies III

and IV) that can explain the high levels of stress of conscience from 'lack of time to provide the care the residents need' (SCQ item 1) reported in studies I and II. Furthermore, the qualitative results from study III can partly explain the high levels of stress of conscience from 'having to deal with incompatible demands in one's work' (SCQ item 3) reported in study I. This deeper understanding about the quantitative results would not have been gained if qualitative data had not been used.

The qualitative studies

Studies III and IV had qualitative designs based on interviews in which narratives were encouraged, and qualitative thematic content analysis was used in both studies to analyse the texts. In studies III and IV, the intention was to use the procedures to achieve trustworthiness, i.e. credibility, dependability and transferability, as suggested by Graneheim and Lundman (2004). In both studies, representative quotations were used in the presentations of the results in order to help the reader to judge the credibility of the results (ibid., Elo *et al.*, 2014). In study III, examples of the analysis were provided to show how meaning units, condensations, and abstractions were made because this can be helpful in assessing the credibility of the results (Graneheim, & Lundman, 2004). It has also been suggested that it is important to include more than one researcher in the analysis to increase trustworthiness (Elo *et al.*, 2014). In both studies, several researchers were involved in analysing the text, which is known as "investigator triangulation" (Polit, & Beck, 2006, p. 333). Investigator triangulation was used to ensure the credibility of the similarities and differences within and between themes by reaching agreement among the researchers (Graneheim, & Lundman, 2004). Regular discussions about the results were carried out within the research teams in order to ensure dependability. All stages of the analysis, including the construction of sub-themes and themes, were discussed openly and critically among the researchers. During the interviews, new insights about the phenomena's under study were gained, and these influenced the follow-up questions. However, interview guides were used in both studies to ensure that the interviewers questioned the same areas for all participants. This was regarded as important for the dependability of the results (ibid.). The goal was to provide as clear and distinct descriptions as possible regarding context, selection process, characteristics of the participants, data collection, and of the analysis in order to facilitate judgments regarding transferability (Elo *et al.*, 2014, Graneheim, & Lundman, 2004).

The question of whether the results are transferable to another context is a decision that must be made by the reader (Graneheim, & Lundman, 2004). However, in study III it was suggested that the transferability of the results

might be limited into contexts where care providers are younger and have less work experience than the participants in that study. It should also be noted that the participants in study III had prior to the interviews participated in a intervention aiming to in cooperation with HCP find ways to constructively deal with troubled conscience. The researchers had, together with the care providers, processed some situations that generated troubled conscience, but never troubled conscience from working with guidelines. However, it is possible that participating in the intervention had made the participants more aware about their conscience and improved their ability to talk about their conscience and to interpret what their conscience tells them. This can be an advantage in the sense that it might have made the interviews richer in content than they would have been otherwise. A possible disadvantage is that this might reduce the transferability of some of the results to other contexts.

Narrative interviews have been described as a conversation between the person being interviewed and the interviewer where the interviewer's pre-understanding can influence both the interviews and the interpretations of the interview text (cf. Mishler, 1986, ch. 1). It has been argued that it is not possible to free ourselves from our pre-understanding and that we are only aware of parts of it (Lindseth, & Norberg, 2004). However, it is possible to deepen and broaden our awareness of our pre-understanding through critical reflection and by conversing with other people about phenomena we take for granted (ibid.). Regular discussions among all co-authors about the results in both qualitative studies were held in order to enlighten us about our pre-understandings. Working together in a research group in such a way has many advantages; however, there is a danger that consensus among the researchers can hinder critical viewpoints. In my opinion, the characteristics of the group discussions could be described as open, active, lively, constructive, and critical.

Qualitative content analysis has been criticized for having the limitation of being reductionist (Dixon-Woods *et al.*, 2005, Burnard, 1991). In content analysis, the text is broken down into fragments and the whole text is at no point offered to the reader (Burnard, 1996). There is a risk that breaking the text down into fragments can reduce complexity and context (Dixon-Woods *et al.*, 2005), and this process can mean that the 'whole' of the interview might be lost (Burnard, 1991). In order to take measures against this potential problem, efforts were made to keep this problem in mind during the analysis. Efforts were also made to listen to the tape recordings and read the text repeatedly and to keep these in mind during the analysis in order to counteract this potentially problematic issue.

Conclusions, clinical implications, and further research

The results of this thesis regarding stress of conscience, perceptions of conscience, burnout, social support, person-centred care and narrated experiences are understood to be affected by existing values in society, how the care of older people is organized as well as influenced by what happens in daily practice in the encounters between HCP and residents. The results of the thesis show that it is important to provide HCP with opportunities to follow and express what their conscience tells them at their workplace in order to buffer the effects of stress of conscience. Support, knowledge, involvement, time, and additional resources are key issues that can help care providers to work more constructively with guidelines in their daily practice. The results show that in times of downsizing and reorganisation it is important to exercise leadership that promotes care providers' feelings of involvement, security, and togetherness in order to relieve some of the HCP's burdensome experiences. An overall understanding of the results is that it seems important to organize the residential care of older people in such a way that registered nurses and leaders are able to be present in HCP's daily practice. HCP need attendant and supportive leaders who can help them to solve various forms of work-related problems and to help them make priorities in the daily care of residents. This seems important regardless of whether the priorities are between guidelines and residents' needs or a consequence of an increasingly stressful work environment during times of downsizing and reorganisation. Further studies are needed in order to investigate the importance of gender in relation to stress of conscience and if different kinds of support are needed for women than for men in order to buffer the effects of stress of conscience. Finally, more longitudinal multilevel studies are needed in order to investigate how organisations' characteristics and organisational changes affect HCP's levels of stress of conscience.

Acknowledgments

It would have been impossible to complete this thesis without all the support I have received over the years from a lot of people. I would in particular like to thank the following:

All the participants who answered the questionnaires, and everyone who shared their experiences with me during the interviews.

My supervisor *Gunilla Strandberg*. Thank you for the excellent and outstanding supervision over these years. Thank you for sharing your research knowledge and experiences with me, it has been truly inspiring. Thank you for helping me to think and reflect from multiple perspectives yet not lose the common thread. Thank you for motivating me and helping me to overcome the various difficulties we encountered over these years. Through your wisdom and knowledge, I have gained a more structured form scientific thinking.

My co-supervisor *Eva Ericson-Lidman*. I am truly grateful for all your support and encouragement over these years. Thanks for all the supportive discussions in which we discussed all sorts of problems. Through these discussions I have reached solutions that never would have been reached without your help. I would also like to thank you for having the ability to make me laugh at times when laughter has been needed.

My co-supervisor *Astrid Norberg*. I am truly blessed to have had the privilege and honour to work with you. You have been very supporting over these years, and through your knowledge and wisdom you have given me ideas that are now part of this thesis. I have learned so much from your brilliant philosophical thoughts.

My closest family, without your support this thesis would never have been completed. My dearest wife *Malin*, thanks for your patience when I have been in my “bubble” working on this thesis. Thanks for being so understanding and supporting during this time. You are the most wonderful person I know; you are my friend and life companion who makes my life richer. To my wonderful children, *Jacob* and *Ilsa*, thanks for reminding me of what is important in life and for puncturing the “bubble” when it has needed punctured. You bring so much joy in my life, and for that I am infinitely grateful.

I would like to thank my co-author *Sture Eriksson* for sharing his statistical expertise with me. Especially for supporting me during times when I have been stuck with the programming language R.

To *Krister Kågström* at the Campus in Skellefteå, thanks for always helping me with the various computer-related problems that have occurred over the years.

To my wonderful parents, *Anita* and *Stefan*, for taking care of the children when needed despite the long distance between our homes. Thanks for supporting and believing in me.

The most wonderful parents-in-law, *Dan* and *Anita*, thanks for spoiling my whole family with delicious food and for all the pleasurable activities we have done together. I am truly grateful for all the different kinds of support you have given me and my family over these years.

To all the guys in “*Öbergs gäng*”, *Leif*, *Sten*, *Ronald*, *Gösta*, *Lars-Ivar*, and *Fredrik*. Thanks for all the outstanding meals and various brews we have shared together. Thanks for all the wonderful stories and laughter you given me and for all the unforgettable memories from the great outdoors you have given me. With you guys, I can truly recharge my batteries, and this has been essential during these years.

To everyone at the Department of Nursing who make the work environment supporting and easy to work in. I would especially like to thank all my doctoral colleagues during these years, you have made this journey interesting and exciting.

To all my friends at the European Academy of Nursing Science, the weeks with you in Nijmegen and Rennes have been a learning experience characterized by friendship. I would like to especially thank *Eriikka*, *Loreena*, *Victoria*, *Indre*, and *Sonja* for your great teamwork.

To all friends of my family, *Marie* and *Anders*, *Erik* and *Malin*, *Magnus* and *Anna*, for all the various activities our families have done together during these years.

I must also thank the greatest dogs in the world, *Uma* and *Frej*, thank you for all the unforgettable moments in the great outdoors we have shared and the wonderful memories you have given me.

This work was supported by grants from the Swedish Research Council [grant no. K2011-70X-21823-01-3]; the Swedish Council for Working Life and Social Research [Dnr: 2010-0296]; AFA Insurance [reference number: 090136]; and the Medical Faculty of Umeå University.

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