

## The level of development of nursing assistants' value system predicts their views on paternalistic care and personal autonomy

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### Abstract

The quality of care is substantially influenced by the staff's value priorities. The purpose of this study was to identify and characterize value systems among nursing assistants and nurses' aides, and to assess relations between their value systems and views on good care. A cross-sectional, quantitative study in a Swedish municipality was performed (N = 226). Three distinct value systems were identified, and they corresponded to early (n = 121), middle (n = 88), and late (n = 17) conventional stages of ego development. Early conventional value systems emphasized strict rules, routines and working conditions of staff, while middle and, in particularly, late conventional value systems stressed individualization and autonomy of older people. Assessment of value system, socio-demographic, and occupational variables showed that the value systems had a stronger predictive impact on views on care ethics, participation, and autonomy. The results indicate that staff with late conventional value systems prioritized older persons' exercise of autonomy, while paternalism held priority in staff with early conventional value systems.

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## Introduction

The quality of care provided to older adults in nursing homes and through home care is, to a large extent, determined by educational, organizational and personality characteristics of the staff (Chung 2013; Sheridan et al. 1992). Personality characteristics such as one's value system, cognitive and social abilities, especially nursing assistants and nurses' aide obviously have an important impact on the daily care provided to the older people (Bowers & Becker 1992). Value priorities have been shown to play an important role in even seemingly trivial activities like getting a person dressed, which can be done with different degrees of participation from the older person depending on the staff's respect for integrity and autonomy (Dauwerse et al. 2012; Evers et al. 2012; Persson & Wästerfors 2009).

In Sweden, a platform of fundamental values for elderly care was amended to the Social Service Act on the 1<sup>st</sup> of January 2011 Social Services Act (SFS, 2001: 453). The Act states that elderly persons should, to the extent possible, be able to choose how and when they receive support, be involved in the decision-making processes, and have their autonomy respected. Thus, central values should be privacy, integrity, autonomy, participation and individualization of care.

In Sweden, the care for older people is provided by trained and qualified staff (Trydegård 2012), mainly by nursing assistants with a three year high school education specific for this profession. A small and decreasing fraction of the staff is nurses' aides who typically have little formal education but extensive experience from working in care organizations. The nursing assistants and nurses' aides are organized in rather independent teams with delegated responsibility for the daily care. A university educated nurse is often in charge of several teams, implying relatively infrequent interactions and meetings for instructions (usually restricted to communication on demand and weekly routine meetings). The terms "nursing assistant" and "nurses' aides" are used somewhat differently internationally, but generally, and in Sweden, the nursing assistants have more formal

education than the nurses' aides. However, the extent and quality of their education could differ widely between different countries.

Nursing assistants with poor education have been reported to focus on paternal, concrete and physical aspects of caring, being less capable of solving abstract problems, and to show negative attitudes towards changes (Dauwerse et al. 2012). In a Swedish study, it was found that nursing assistants supported the older persons' preferences to a higher extent than nurses' aides (Mattiasson & Andersson 1995). This is in conformity with results showing that the level of professional training predicts the extent of autonomy given to the patients (Leibovich et al. 2011).

Among nursing assistants, two mental models have been suggested to guide their caring approach (Anderson et al. 2005). "The Golden Rule" where the key question is "what would I want to be done for me?," and the staff imagines herself in the resident's situation and treats the older person according to what would be her own preferences as an aged person. In the other mental model, "Mother Wit," analogies are made between caring for children and caring for older persons, implying that the older person was treated like a child, which run the risk of inappropriate care (i.e. infantilization) or barriers to appropriate care. These ways of relating to older persons appear to be insufficient in order to provide individualized and person-centered care (Anderson et al. 2005).

Interpersonal cognitive complexity, i.e. the ability to perceive others in complex and personalized ways, has been shown to be an important factor among gerontological caregivers (Medvene et al. 2006). People with more developed abilities for interpersonal cognitive complexity show enhanced understanding of others' perspectives, demonstrated more authentic empathy, and related to older persons in more individualized ways (Grosch et al. 2011). This is in accordance with Gilligan's suggestion of a developmental pathway for care reasoning moving from primarily a self-concern approach, to an other-concern focus, and finally to a balance between other and self (Gilligan 1982; Pratt et al. 1991; Skoe et al. 1996; Skoe & von der Lippe 2002). In this way the care reasoning involves an increasingly more complex understanding of human relationships, a more thorough understanding of autonomy, and a more differentiated view on the appropriateness of various caring approaches and measures for different individuals (Juujärvi et al. 2012).

### *Theoretical Frameworks*

*Adult development theory.* In developmental psychology, the subfield of adult development stems from Piaget's theories and research on psychological development of children (1954). Consequently, this subfield embraces several theories on personality development after the adolescence, and over the last decades, empirical evidence has piled up in support for these theories (Cook-Greuter 1999; Kegan 1994; Kohlberg 1971, 1981; Labouvie-Vief et al. 1987; Loevinger & Blasi 1976; Loevinger & Hy 1996; Manners & Durkin 2001; Pfaffenberger 2005; Pratt et al. 1991; Sinnott 2003; Torbert 2004; Westenberg et al. 1998). Development in this context refers to growth in complexity of meaning-making and world views as the individual matures. The degree of development has been found to have strong predictive validity in relation to competence at work and leadership agility (Joiner & Josephs 2006; Torbert & Rooke 2005), personal autonomy and integrity (Loevinger & Blasi 1976), and views and attitudes on care, responsibility, tolerance and discrimination (Kjellström & Ross, 2011; Sjölander et al. 2014; Juujärvi et al. 2012).

According to the stage theory of ego development, personality characteristics develop in a sequential process from pre-conventional stages, via conventional to post-conventional stages (for review, see e.g. Commons 1989, Commons 1990; Cook-Greuter 1999; Manners & Durkin 2001). In large adult samples, only a small percent demonstrate pre-conventional personality characteristics. The large majority of adults show characteristics typical for conventional stages of development (~ 75%) (Torbert 2004).

At the early conventional stage of development, the *diplomat* or *conformist stage* (in ~ 10% of an adult population), the meaning-making structure is typically based on conformity with social rules and norms (Loevinger & Blasi 1976; Torbert 2004; Westenberg & Block 1993). The world view is constructed on absolutism, polarities and dualistic relations, i.e. a distinct good and bad, right and wrong, etc. (Torbert 2004). Knowledge is assumed to be absolute in the sense that there is only one single correct answer to a given issue. Things can be known with absolute certainty, and experts know the answers. Judgements of other people are normally founded on one's own reactions and beliefs, i.e. the perspective taking ability is self-centred (Cook-Greuter 1999).

The middle conventional stage, called the *self-aware* or *expert stage* (in ~35% of an adult population), is characterized by a mindset that are focused on self-satisfaction and social acceptance through occupational skills and achievements (Torbert 2004). Although understanding the perspectives of other people is based on self-centeredness, there is an increasing understanding of specificity and uniqueness. Abstract concepts and phenomena, such as reality, can be explained in scientific terms and thereby be understood the same way by all people (Cook-Greuter 1999; Loevinger & Blasi 1976; Torbert 2004).

At the late conventional stage of development, the *conscientious* or *achiever stage* (in ~30% of an adult population), most people show recognition of multiple sources of knowledge, and that different perspectives on an issue are natural. This stage is also characterized by a pronounced self-responsibility, goal-directedness and conscientiousness. The ability to understand other people's perspectives is highly developed, as well as the necessity of critical assessment as a means to develop both individuals and the society (Cook-Greuter 1999; Loevinger & Blasi 1976; Torbert 2004).

Less than 20% of an average adult population holds a post-conventional meaning-making structure, which is characterised by an understanding of the relativity of reality and that our construction of meaning is inherently linked to social structures, history, future, and personality characteristics. Individuality and the uniqueness of situations, phenomena and persons are recognized, as well as the awareness of paradoxes and self-constructed identities (Cook-Greuter 1999; Loevinger & Blasi 1976; Torbert 2004).

*Developmental mechanisms.* Differentiation and integration are fundamental mechanisms in all developmental processes where there is a progression from lower to higher forms. Differentiation is mostly defined as an increasing complexity of, and specialization and interdependence of elements, whereas integration is viewed as a congruent organization of the elements. These evolutionary mechanisms emanate from the ideas of Greek philosophers and have since then been supported by an abundance of empirical evidence in a variety of scientific disciplines, e.g. ontology, epistemology, cosmology, embryology, physiology, psychology and sociology (for references, see e.g. Akrivou 2008; Johnson 2000; Kolb 1984). In developmental psychology, the concepts of differentiation and integration are fundamental for theories of psychoanalysis (e.g. Adler 1964; Mahler

et al. 2008), of self-psychology on identity, development and adjustment (Blasi & Glodis 1995; Erikson 1968), and of adult ego development (Blasi & Glodis 1995; Cook-Greuter 1999; Kegan 1994; Loevinger & Blasi 1976; Piaget 1954). Increasing differentiation of the meaning-making structure is characteristic of conventional stages of ego development (e.g. right vs. wrong), while increasing integration is the dominating trait in post-conventional stages of development (Cook-Greuter 1999; Loevinger 1979).

*Value system.* A value system is a complex set of values with different priorities held by an individual or a society (see e.g. Rokeach 1973; Schwartz 1992). In general, a value system can be either idealized or realized. The idealized value system is a group of differently prioritized individual values determining what is right and wrong, the realized value system is the one people actually use in everyday life. Thus, the idealized and realized value systems might be identical, but for most people the realized value system deviates by situational exceptions.

A person's value system is shaped by several factors. For most people, their idealized value system is a reflection of norms and values of their society, i.e. the cultural value system, which is the set of values considered desirable or undesirable in the group of people to which the person belongs. However, the value system held by individuals within a seemingly homogenous culture might be quite different due to specific value priorities retained in sub-cultures developed in families, workplaces, religious communities, and/or political organizations.

Another factor that forms and modifies a person's value system is the situational context and cognitive capacity to reflect on the relative importance of values, how different values relate to each other, and the implications of different value priorities. One's stage of ego development has been found to be of importance for how people prioritize various values (Cook-Greuter 1999; Kohlberg 1971; Loevinger & Blasi 1976; Loevinger & Hy 1996). For instance, at the early conventional stage of ego development, highly prioritized values are conformity, friendliness, pleasing behaviors, social stability and security (Westenberg & Block 1993). At the late conventional and early post-conventional stages, the value system is characterized by an open-minded and less dogmatic relation to values, beliefs and behaviors of others, implying higher priority to values such as tolerance, autonomy, relativity and individuality (Helson &

Roberts 1994; McCrae & Costa 1980; Pals & John 1998; White 1985). The correspondence between one's value system and stage of ego development makes it possible to estimate the stage of ego development based on one's articulation of their value system (Sjölander et al. 2014).

### Aims and Hypotheses

The aims of the present study were to identify and characterize common value systems among nursing assistants and nurses' aides employed in Swedish old age care, and to assess the relations between value systems and views on good care.

The following hypotheses were tested:

- It is possible to identify distinct value systems among nursing assistants and nurses' aides, and to determine the relationship of these value systems to the relative levels of ego development.
- Less developed value systems are related to a more paternalistic view on good care, whereas more developed value systems are characterized by higher priority to dialogue, autonomy, and preferences expressed by the older persons.
- Value system is a good predictor of individual nursing assistants' and nurses' aides' views on good care for older persons.

### Methods

#### *Design and Setting*

The study was designed as a cross-sectional, randomized, and quantitative investigation of nursing assistants and nurses' aides working in Sweden. The participants were employed in old age care as nurse assistants or nurses' aides and worked in nursing homes or home care in a Swedish municipality with approximately 100,000 inhabitants.

#### *Procedure*

In November 2012, a total of 1715 nurse assistants or nurses' aides worked at the municipality at 33 nursing homes and 30 home care units.

The participating nursing home units ( $n = 13$ ) and home care units ( $n = 8$ ) were randomly selected. Within each unit all staff working day-time were invited (334 out of 457) and (123 out of 147), resulting in a sample of 457. Of these, 87% (397) agreed to participate. The questionnaire was administered at staff meetings by the head of each unit after providing oral and written information about the study. Of these, 58% ( $n = 229$ ) answered the questionnaire. Three were excluded since their answers were incomplete, resulting in a final study group of 226.

### *Measures*

A questionnaire was constructed to cover three different areas: one on socio-demographic and occupational variables, i.e. gender, age, education, employment position, work experience, and working location (see Table 2), one on value priorities (i.e. value system), and one about views on good care.

*Value system.* The staff's value systems were assessed through six questions covering different themes: education, criticism, important values, knowledge, conflicts, and children. For each question the respondent was asked to rate the relative importance of five answers or statements (see Table 1). Thus, 30 separate variables were included in the analysis of value system. The rating was done on a five-point ordinal scale, ranging from unimportant to most important. The statistical reliability was sufficient to disclose three categories in the data set, i.e. the Cronbach's  $\alpha$  coefficient = 0.81. The scores on a slightly different questionnaire have been shown to be significantly correlated to the individual's stage of ego development ( $r = 0.536$ ;  $p = 0.015$ ) (Sjölander et al. 2014).

*Characteristics of good care.* Nineteen statements on care ethics and the role, participation and autonomy of the older person in the care practices, were included in the questionnaire (see Tables 3–5). All statements were rated on a five point ordinal scale ranging from disagree completely to agree completely.

### *Data Analyses*

*Value system.* Distinct value systems, i.e. common patterns of value priorities, were identified using principal component-based pattern recognition

statistics, i.e. Partial Least Squares Regression to Latent Structures (Wold et al. 2001). Categorization of the individuals' value system was based on a probabilistic algorithm. The pattern recognition method and the categorization algorithm have been described in detail elsewhere (Sjölander et al. 2014).

*Differentiation of value priorities.* The extent of differentiation between groups of related values was quantified and used as an indicator of development. A factor analysis, with orthogonally rotated factors (Varimax rotation), on the 30 value variables was conducted to identify clusters of related variables (see Table 1). For each individual, the average rating was calculated for the variables with the largest loading on a given factor (variable loading  $> 0.5$ ), generating rating averages for clusters of related variables. In this way an average rating score was calculated for each significant factor, defined as the factors with a cumulative eigenvalue larger than 1.0. The value clusters were arranged according to their relative importance, i.e. from lowest to highest rated, generating a profile of value priorities for each individual (Figure 1). By a simple regression model, a straight line was fitted to the profile and the slope of the line was used as a quantitative measure of the degree of differentiation between different value priorities. A steeper slope indicated a more differentiated, and hence developed, value system.

*Prediction of views on good care.* Binary logistic regression models were done to evaluate main effects of the value system, socio-demographic, and occupational variables on views on good care. Nineteen models were calculated, one for each statement on care ethics and the participation and autonomy of the older persons in the care process. The dependent variables, i.e. the 19 statements on good care, were dichotomized to predict the probability of low and high outcomes. The dichotomizations were based on median scores. The predictive impact of the value systems and the socio-demographic variables were expressed as odds ratios (OR) with 95% confidence intervals (95% CIs).

### *Statistics*

The statistical package SPSS (version 11.5, SPSS Inc, USA) was used for descriptive statistics, calculations of averages, standard deviations and

statistical comparisons, including the binary logistic regression analyses and the factor analysis. The multivariate pattern identification analysis was done with SIMCA-P+ (version 11, Umetrics, Sweden).

### *Research Ethics*

All participants engaged in an informed consent process, emphasizing that participation was voluntary, with the right to withdraw from answering the questionnaire at any time. The main results of the study has been presented to, and discussed with, the participants and executives within the care organization.

## Results

### *Value Systems among Nursing Assistants and Nurses 'Aides*

The pattern recognition analysis revealed three significant principal components, indicating three distinct value systems. Together, the three principal components explained 40% of the variance in the data set.

By probability calculations, individuals' value profiles were classified into one of the three distinct value systems. A total of 88 individuals showed a values profile that was most similar to value system 1, i.e. the value pattern disclosed by the first principal component. All together 121 individuals demonstrated a profile with the highest correspondence to value system 2 (the pattern disclosed by the second principal component), and 17 individuals had a profile most similar to value system 3 (the pattern disclosed by the third principal component).

### *Hierarchical Arrangement of Value Systems*

The hierarchical arrangement of the three value systems was based on a factor analysis, using orthogonal rotation of the factors to maximize variance between the variables. A factor analysis groups variables according to their pattern of correlation, implying that related variables load highly on the same factor. The factor analysis resulted in a total of 9 factors accounting for 66.6% of the variance. The rotated component matrix, including tentative factor names, is presented in Table 1.

**Table 1.** Component matrix (varimax rotation) for the 30 value variables

Variables	Factors								
	1. Social conformity	2. Epistemological relativism	3. Over- confidence in education	4. Conflicts for improvement	5. Independence and creativity	6. Conflict avoidance	7. Obedience and hard work	8. Critique is insulting	9. Expert knowledge
What characterize good education?									
It improves my chances to get a safe and secure employment	0.092	0.007	<b>0.775</b>	0.053	- 0.041	- 0.059	0.116	0.235	0.103
It is important for developing autonomous individuals and a society where all people are of equal value	0.192	- 0.217	<b>0.639</b>	0.362	0.151	- 0.114	0.055	0.089	0.145
It improves my possibility to understand myself and the world	0.183	0.290	<b>0.680</b>	0.022	0.150	- 0.077	0.125	- 0.166	0.099
It is important for my personal goals and future achievements	0.218	0.115	<b>0.658</b>	0.027	0.065	0.352	- 0.102	0.043	- 0.137
It improves our rationality and the functions of the society	0.356	0.136	<b>0.534</b>	- 0.184	0.279	0.316	0.039	- 0.019	- 0.177
What are your views on criticism?									
Positive and negative views are a natural part in all healthy relations	0.396	<b>0.554</b>	0.094	0.026	0.216	- 0.240	- 0.061	- 0.240	0.034
I appreciate critics that reveals my hidden motives and behaviors	<b>0.537</b>	0.197	0.093	0.048	0.230	0.036	- 0.082	- 0.438	0.311
I am insulted by critique from people who do not know what they are talking about	0.118	- 0.073	0.185	0.004	- 0.069	0.036	0.006	<b>0.719</b>	0.165
I accept constructive critique that might be beneficial for the development of myself and the society	<b>0.771</b>	0.153	0.100	0.055	0.198	- 0.055	- 0.006	- 0.099	0.174
I regard critique as a reminder of societal norms and regulations	<b>0.575</b>	- 0.104	0.122	- 0.030	0.274	0.194	0.216	0.229	0.171

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Table 1 (Continued)

Variables	Factors								
	1. Social conformity	2. Epistemological relativism	3. Over- confidence in education	4. Conflicts for improvement	5. Independence and creativity	6. Conflict avoidance	7. Obedience and hard work	8. Critique is insulting	9. Expert knowledge
What is most important for you?									
To develop my ability to scrutinize myself and the world I am part of <sup>a</sup>	0.357	0.059	0.220	0.387	0.163	0.370	0.041	- 0.295	0.032
That my surroundings value my expert competencies and occupational skills	<b>0.750</b>	0.233	0.149	0.118	- 0.002	- 0.021	- 0.003	0.142	- 0.175
To contribute to a positive development of other people	<b>0.613</b>	0.022	0.265	0.360	- 0.011	0.182	- 0.008	- 0.187	- 0.013
That the society provides security by accepting and appreciating me	<b>0.697</b>	0.126	0.234	0.201	- 0.065	0.108	0.068	0.203	- 0.181
That my surroundings satisfy my needs <sup>a</sup>	0.504	- 0.091	0.067	0.189	- 0.204	0.469	0.176	0.159	- 0.120
What are your views on knowledge?									
We know some things. We also know things that we do not know, and other things are we unaware of that we do not know	- 0.032	<b>0.576</b>	0.118	0.139	0.065	0.208	0.224	- 0.045	- 0.239
The feeling often determines what is right or wrong <sup>a</sup>	0.088	0.476	- 0.011	0.038	0.296	0.268	- 0.168	0.332	0.205
Experts and specialists have the best knowledge	- 0.037	0.082	0.085	0.021	- 0.025	0.038	0.106	0.149	<b>0.820</b>
There are both things we definitely know and things that we do not yet understand	- 0.007	<b>0.654</b>	0.108	0.164	0.057	- 0.333	0.059	0.066	0.016
Different views on knowledge are reasonable since phenomenon can be interpreted in different ways	0.232	<b>0.717</b>	0.008	0.096	- 0.001	0.040	- 0.016	- 0.101	0.224

Table 1 (Continued)

Variables	Factors								
	1. Social conformity	2. Epistemological relativism	3. Over- confidence in education	4. Conflicts for improvement	5. Independence and creativity	6. Conflict avoidance	7. Obedience and hard work	8. Critique is insulting	9. Expert knowledge
What are your views on conflicts among friends and family?									
Conflicts are often caused by people with wrong ideas	0.067	-0.133	0.042	0.028	-0.065	<b>0.807</b>	0.150	-0.045	0.041
Conflicts are interesting since they expose different views	0.090	0.204	0.133	<b>0.789</b>	-0.079	-0.015	-0.139	0.032	0.025
I tolerate conflicts since they may lead to improvements	0.194	0.151	-0.012	<b>0.861</b>	0.121	-0.021	-0.024	-0.031	0.005
I avoid conflicts since they disturb the social atmosphere	0.044	0.116	-0.039	-0.246	0.148	<b>0.572</b>	0.222	0.402	0.075
Conflicts are a natural part of human relations <sup>a</sup>	0.185	0.549	-0.014	0.514	0.139	-0.050	0.039	-0.022	-0.050
How important are the following child qualities?									
Tolerance	0.032	0.113	0.069	0.027	0.469	-0.107	<b>0.620</b>	0.178	-0.085
Independence	0.096	0.091	0.086	0.051	<b>0.836</b>	-0.025	0.136	-0.006	0.089
Creativity	0.083	0.116	0.118	0.055	<b>0.765</b>	0.022	0.123	-0.119	-0.098
Obedience	0.089	-0.022	0.062	-0.083	-0.005	0.099	<b>0.834</b>	0.045	0.085
Hard work	0.003	0.084	0.059	-0.068	0.189	0.308	<b>0.749</b>	-0.121	0.069

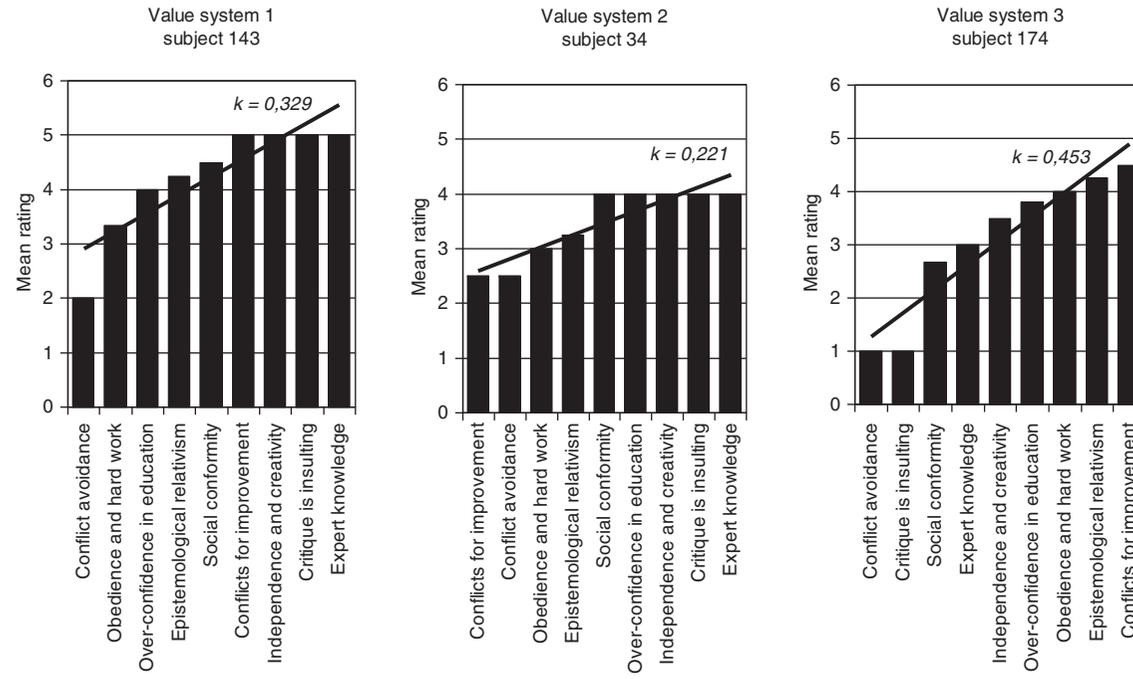
<sup>a</sup>These four variables did not load uniquely high on any of the factors.  
The variables are in bold that loaded highly on a specific factor.

For each individual, an average rating score was calculated for those variables loading strongly on the 9 factors, thus generating average ratings for 9 value clusters. By arranging these rating scores hierarchically, from lowest to highest, the slope of a straight line fitted to the individual's profile was calculated (Figure 1). The slope was used as a quantitative measure of differentiation between value clusters with different priority. For the 88 individuals with value system 1 the mean slope was 0.32 (SD, 0.11), while the 121 individuals with value system 2 showed a mean slope of 0.24 (SD, 0.11), and the 17 individuals with value system 3, a mean slope of 0.41 (SD, 0.12). An ANOVA was conducted on the average slope values, showing significant differences between the sub-groups ( $F(2, 223) = 24.8, p < 0.0001$ ). The post-hoc tests revealed significant differences between value systems 1 and 2 ( $p < 0.0001$ ), value systems 1 and 3 ( $p < 0.01$ ), and value systems 2 and 3 ( $p < 0.0001$ ). Thus, the degree of differentiation between the value clusters was highest for the sub-group with value system 3, second highest for the sub-group with value system 1, and lowest for the sub-group with value system 2.

### *Characterization of the Value Systems and Their Relation to Development Stages*

To characterize the content of value priorities in the three value systems, and to evaluate their level of development on the early, middle and late conventional scale, the mean rating for each of the nine value clusters was calculated separately for the three value systems (Figure 2). A MANOVA was carried out on the nine value clusters showing a significant main effect for value system (Wilks' Lambda  $F(18,324) = 23.7, p < 0.0001$ ). The patterns of value priorities indicate that the sub-group with value system 2, the least differentiated system, was dominated by individuals with an early conventional world view, emphasizing a society that provides stability, harmony, conformity and collective belonging (Sjölander et al. 2014; Loevinger & Blasi 1976). In comparison to the other two value systems they scored highest on "conflict avoidance," lowest on "epistemological relativism" and "independence and creativity," and together with the sub-group with value system 1 they scored high on "critique is insulting."

**Figure 1.** Individual examples of slope ( $k$ ) calculated by simple linear regression to fit the mean rating of 9 value clusters identified in the factor analysis and arranged according to priority.



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The sub-group with value system 1 put particularly high value on conformity, education, achievement, and expertise, which are cardinal characteristics of middle conventional meaning making structures (Sjölander et al. 2014; Loevinger & Blasi 1976). Thus, they scored highest on “social conformity,” “over-confidence in education,” “conflicts for improvement,” and “expert knowledge” (Figure 2).

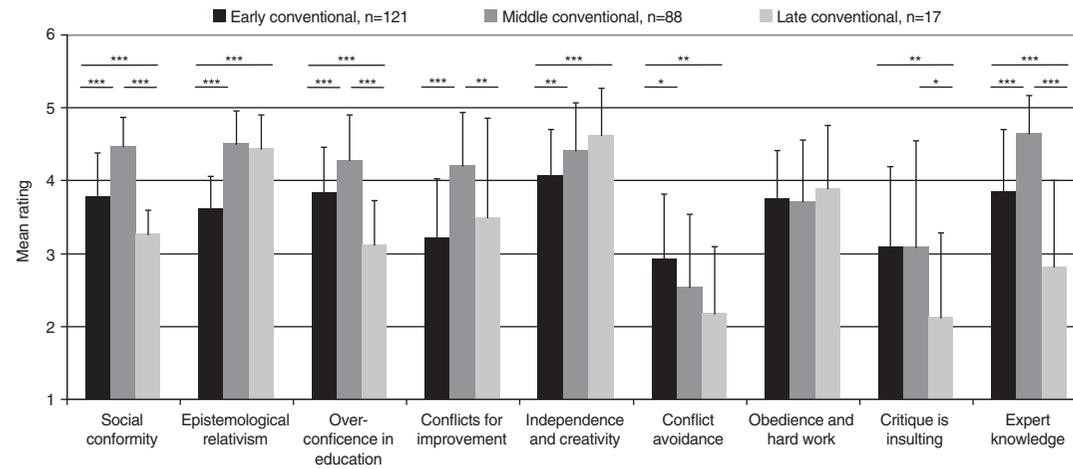
In comparison to the other two value systems, the sub-group with value system 3 scored highest on “independence and creativity” and lowest on “social conformity,” “over-confidence in education,” “expert knowledge,” “conflict avoidance” and “critique is insulting.” Taken together, the pattern of value priorities of the sub-group with value system 3 indicates a late conventional meaning-making structure where social conventions and cultural values are beginning to be questioned, and where independence and individual development gain in importance (Sjölander et al. 2014; Loevinger & Blasi 1976). Thus, the hierarchical arrangement of the three value systems corresponds nicely to value priorities typically found among people with early, middle and late conventional meaning-making structures.

### *Prediction of Views on Good Care*

In order to evaluate the predictive impact of nursing assistants’ and nurses’ aides’ value system on their views on good care for older persons, regression models were calculated where main effects of value system type, socio-demographic, and occupational variables were compared. Socio-demographic and occupational characteristics of the three sub-groups with different value systems are given in Table 2. There were no statistically significant differences between the sub-populations, with the exception for the relative frequency of staff work at nursing homes and home care. Among those with a late conventional value system, it was significantly more common to work at a nursing home and less common to work in home care in comparison to the sub-group with a middle conventional value system.

The regression analyses revealed that the level of value system was significantly related to the outcomes of 10 of the 19 statements, workplace site to 6 of the statements, age to three, level of education to three, work

**Figure 2.** Characteristics of the early, middle and late conventional value systems expressed as mean rating and SD of the 9 variables identified by the factor analysis. Statistical comparisons by Benferroni adjusted post-hoc tests and level of significance indicated by stars (\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ ).



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**Table 2.** Socio-demographic and occupational characteristics of the three sub-groups with different value systems

	Early conventional, n = 121	Middle conventional, n = 88	Late conventional, n = 17	<i>p</i>
Gender distribution (women/men)	114/7	81/7	17/0	n.s. <sup>a</sup>
Age (mean ± SD)	44 ± 12	42 ± 13	49 ± 12	n.s. <sup>b</sup>
Education, highest level				
Compulsory, 6–9 years (%)	15	12	6	n.s. <sup>a</sup>
High School, 10–12 years (%)	78	80	88	
University, ≥ 13 years (%)	7	8	6	
Occupation				
Nursing assistant (%)	82	82	94	n.s. <sup>a</sup>
Nurses' aide (%)	18	18	6	
Work place				
Nursing home (%)	60	48	82	< 0.05 <sup>b</sup>
Home care (%)	40	52	18	
Employment years in old age care (mean ± SD)	17 ± 10	14 ± 11	19 ± 12	n.s. <sup>c</sup>

<sup>a</sup>Kruskal Wallis Test.<sup>b</sup>One-way ANOVA.<sup>c</sup>Significant difference between middle and late conventional ( $p < 0.01$ , Mann-Whitney U-test).  
n.s. =  $p > 0.05$ .

experience to three, gender to one, and occupation to one of the care statements.

The outcome of the 6 regression models on ethical issues is presented in Table 3. In comparison to the sub-group with an early conventional value system, the sub-groups with middle and late conventional value systems were more likely to be in favor of an individualized approach in the old age care and to have an enhanced awareness of possible conflicts between ethical issues, but were less likely to advocate ethical standards without exceptions. To adopt ethical standards without exceptions was more agreeable among staff with high school education in comparison with staff with compulsory school as their highest level of education. Those working

**Table 3.** Binary logistic regression models for predicting nursing assistants' and nurses' aides' views on care ethics

Statement	OR (95% CI)																	
	Value system			Gender		Age (years)			Education (years)			Occupation		Work place		Work experience (years)		
	Early conventional	Middle conventional	Late conventional	Men	Women	20-30	31-50	> 51	6-9	10-12	≥ 13	Nurses' aid	Nursing assistant	Home care	Nursing home	< 5	5-10	> 10
Ethics is best learned from experts	1	1.1 (0.5-2.5)	0.4 (0.0-3.5)	1	0.3 (0.1-1.3)	1	2.4 (0.6-9.1)	<b>5.6</b> ( <b>1.3-23.4</b> )	1	2.2 (0.6-8.2)	<b>6.6</b> ( <b>1.1-38.8</b> )	1	1.1 (0.4-3.4)	1	<b>0.3</b> ( <b>0.1-0.7</b> )	1	0.5 (0.1-1.7)	0.3 (0.1-1.1)
Ethics is about addressing the elderly based on their individual conditions and needs	1	<b>3.8</b> ( <b>1.9-7.7</b> )	<b>4.5</b> ( <b>1.2-16.3</b> )	1	1.0 (0.3-3.9)	1	1.7 (0.6-4.9)	1.8 (0.5-5.7)	1	0.4 (0.1-1.2)	0.9 (0.2-4.4)	1	0.5 (0.2-1.5)	1	1.1 (0.5-2.1)	1	0.7 (0.2-2.3)	0.7 (0.2-2.0)
There is always one approach or action that is the most ethically correct	1	1.6 (0.8-3.1)	0.4 (0.1-1.8)	1	1.5 (0.4-5.8)	1	<b>2.7</b> ( <b>1.0-7.6</b> )	<b>3.2</b> ( <b>1.0-10.1</b> )	1	1.5 (0.5-4.3)	2.6 (0.6-12.5)	1	1.0 (0.4-2.8)	1	1.0 (0.5-1.9)	1	0.6 (0.2-1.7)	<b>0.3</b> ( <b>0.1-0.9</b> )
Occasionally the most ethical action implies that one has to violate regulations or laws	1	0.8 (0.4-1.8)	0.4 (0.1-1.5)	1	2.4 (0.5-11.9)	1	0.8 (0.2-3.2)	1.5 (0.3-6.7)	1	2.5 (0.8-7.7)	1.6 (0.3-8.2)	1	2.3 (0.8-7.1)	1	1.1 (0.5-2.4)	1	<b>0.1</b> ( <b>0.0-0.9</b> )	<b>0.1</b> ( <b>0.0-0.6</b> )
One has to learn the current ethical standards and adopt them without exceptions	1	<b>0.2</b> ( <b>0.1-0.6</b> )	<b>0.1</b> ( <b>0.0-0.5</b> )	1	0.5 (0.0-5.1)	1	0.6 (0.1-3.1)	1.3 (0.2-7.6)	1	<b>7.1</b> ( <b>1.8-27.5</b> )	0.8 (0.1-4.9)	1	1.6 (0.4-6.0)	1	<b>0.3</b> ( <b>0.1-0.9</b> )	1	1.6 (0.3-9.6)	0.7 (0.2-3.7)
To act ethically correct towards a person may imply that you act unethically towards someone else	1	<b>11.9</b> ( <b>4.4-32.2</b> )	<b>5.5</b> ( <b>1.2-26.2</b> )	1	3.0 (0.3-29.4)	1	1.0 (0.2-3.7)	2.1 (0.5-9.5)	1	0.6 (0.2-2.5)	0.4 (0.1-5.2)	1	0.6 (0.2-2.1)	1	1.2 (0.4-3.3)	1	0.4 (0.1-1.7)	0.4 (0.1-1.6)

One model for each statement, and each model containing the same potential determinants.

Relations expressed as odds ratios (OR) with 95% confidence intervals (95% CI).

Statistically significant relations are marked by bold numbers.

in nursing homes were less likely to agree on this ethical approach compared to staff working in home care.

Older staff members and those with university education were more likely to believe in experts as teachers in ethics, compared to young staff members and those with compulsory school as their highest level of education. Staff at nursing homes were less likely to believe that ethics is best learned from experts, as compared to the home care staff.

Old and middle-aged staffs were more likely, as compared to young staff members, to think that a particular ethical approach always is the most correct. Interestingly, staff who had worked in old age care for more than 10 years was less in favor of this statement in comparison with those with less than 5 years of experience. The more experienced staff was also less in support of the statement implying that good ethics may be inconsistent with current laws and regulations.

Table 4 shows that the relations between value systems and issues on participatory care were particularly strong. In comparison to those with an early conventional value system, staff with a late conventional value system were less in favor of a care structure where the staff tell the older persons how and why things should be done, and less in support of a caring approach that is based on the staffs' own preferences on how they would have been liked to be treated. Staff with middle and, in particular, late conventional value systems were more likely to support a participatory approach where the elderly are appreciated as unique individuals and their participation is based on agreements between the older people and the staff. Participation that is decided by the older person based on advice from the staff was more agreeable to those with middle conventional value systems as compared to those with an early conventional value system.

Women, as compared to men, were more in support of a participatory approach that is based on the staff's own preferences on how they would prefer to be treated as old. Nursing assistants, however, were less in favor of this approach in comparison with nurses' aides.

As compared with staff working in home care, the staff in nursing homes was less likely to advocate a participatory setting where the older people are appreciated as unique individuals, and where their participation is based on agreements between the older person and the staff.

**Table 4.** Binary logistic regression models for predicting nursing assistants' and nurses' aides' views on participatory care

Statement	OR (95% CI)																	
	Value system			Gender		Age (years)			Education (years)			Occupation		Work place		Work experience (years)		
	Early conventional	Middle conventional	Late conventional	Men	Women	20-30	31-50	> 51	6-9	10-12	≥ 13	Nurses' aid	Nursing assistant	Home care	Nursing home	< 5	5-10	> 10
Participatory care means that the staff tell the elderly how and why they should be treated in a particular way	1	0.6 (0.3-1.4)	<b>0.2</b> ( <b>0.1-0.9</b> )	1	0.9 (0.2-4.6)	1	1.0 (0.3-3.3)	3.3 (0.8-13.0)	1	1.8 (0.5-6.3)	0.8 (0.2-4.5)	1	1.6 (0.5-4.4)	1	1.5 (0.7-3.2)	1	0.5 (0.1-1.8)	0.5 (0.1-1.8)
Participatory care implies that the staff get information from the elderly about their needs and wishes	1	0.6 (0.3-1.2)	0.6 (0.2-2.2)	1	2.5 (0.6-10.8)	1	0.9 (0.3-2.6)	1.4 (0.5-4.3)	1	1.5 (0.5-4.5)	1.5 (0.3-7.1)	1	0.8 (0.3-1.9)	1	1.0 (0.5-1.9)	1	0.5 (0.2-1.4)	0.5 (0.2-1.3)
Participatory care means that the staff together with the elderly agree on how to organize the care	1	<b>5.5</b> ( <b>2.6-11.5</b> )	<b>10.0</b> ( <b>2.0-50.4</b> )	1	0.2 (0.0-1.4)	1	1.3 (0.4-3.8)	1.0 (0.3-3.4)	1	0.8 (0.3-2.4)	0.9 (0.2-4.4)	1	1.3 (0.5-3.4)	1	<b>0.5</b> ( <b>0.2-0.9</b> )	1	0.4 (0.1-1.5)	0.6 (0.2-2.0)
Participatory care implies that the staff provide advises to the elderly who makes the decisions	1	<b>2.2</b> ( <b>1.1-4.5</b> )	0.5 (0.2-1.9)	1	1.7 (0.4-6.8)	1	0.5 (0.2-1.7)	0.8 (0.2-2.9)	1	1.4 (0.5-4.1)	2.8 (0.5-14.8)	1	1.4 (0.5-3.6)	1	0.5 (0.3-1.1)	1	0.5 (0.2-1.8)	0.7 (0.2-2.1)
Participatory care means that the staff organize the care based how they themselves would have been preferred to be treated	1	0.6 (0.3-1.2)	<b>0.1</b> ( <b>0.0-0.4</b> )	1	<b>4.5</b> ( <b>1.1-18.4</b> )	1	0.5 (0.1-1.6)	0.6 (0.2-2.5)	1	1.8 (0.6-5.8)	1.9 (0.3-10.7)	1	<b>0.3</b> ( <b>0.1-0.9</b> )	1	2.0 (0.9-4.1)	1	1.8 (0.5-6.6)	1.8 (0.6-6.1)
Participatory care is all about considering the elderly as unique individuals	1	<b>3.3</b> ( <b>1.5-7.2</b> )	<b>4.1</b> ( <b>1.1-22.8</b> )	1	1.3 (0.3-5.3)	1	0.8 (0.3-2.3)	1.0 (0.3-3.3)	1	0.5 (0.1-1.8)	0.3 (0.1-1.9)	1	1.6 (0.6-4.6)	1	<b>0.3</b> ( <b>0.2-0.8</b> )	1	0.6 (0.2-1.9)	1.3 (0.4-3.9)

One model for each statement, and each model containing the same potential determinants. Relations expressed as odds ratios (OR) with 95% confidence intervals (95% CI). Statistically significant relations are marked by bold numbers.

Level of development of nursing assistants' value system

**Table 5.** Binary logistic regression models for predicting nursing assistants' and nurses' aides' views on autonomy of the older persons

Statement	OR (95% CI)																	
	Value system			Gender		Age (years)			Education (years)			Occupation		Work place		Work experience (years)		
	Early conventional	Middle conventional	Late conventional	Men	Women	20–30	31–50	> 51	6–9	10–12	≥ 13	Nurses' aid	Nursing assistant	Home care	Nursing home	< 5	5–10	> 10
Self-determination implies that the elderly can do whatever they like	1	0.8 (0.4–1.6)	2.8 (0.7–10.8)	1	0.4 (0.1–1.9)	1	<b>0.2</b> ( <b>0.0–0.6</b> )	<b>0.1</b> ( <b>0.0–0.4</b> )	1	2.5 (0.8–7.8)	3.0 (0.6–15.2)	1	0.6 (0.2–1.7)	1	<b>0.4</b> ( <b>0.2–0.9</b> )	1	<b>0.2</b> ( <b>0.0–0.8</b> )	0.4 (0.1–1.4)
To support the self-determination of the elderly means that the staff have to reflect on how they themselves would prefer to be treated when they get old	1	1.3 (0.7–2.5)	0.6 (0.2–2.1)	1	1.1 (0.3–3.9)	1	0.6 (0.2–1.7)	1.0 (0.3–2.8)	1	0.7 (0.3–2.1)	1.3 (0.3–5.9)	1	0.6 (0.2–1.5)	1	0.6 (0.3–1.1)	1	1.0 (0.3–3.2)	1.3 (0.5–3.7)
Self-determination means that the needs of both the staff and the elderly have to be taken into account	1	0.9 (0.5–1.7)	0.5 (0.1–1.8)	1	1.0 (0.3–3.7)	1	0.5 (0.2–1.4)	0.8 (0.3–2.3)	1	<b>3.2</b> ( <b>1.0–10.1</b> )	<b>5.1</b> ( <b>1.1–24.7</b> )	1	0.5 (0.2–1.2)	1	0.9 (0.5–1.7)	1	1.6 (0.5–4.8)	1.7 (0.6–4.8)
The limitations of the self-determination is decided by the commanding officers and managers	1	1.0 (0.5–2.2)	0.9 (0.2–4.8)	1	2.3 (0.4–13.1)	1	0.6 (0.2–1.7)	0.6 (0.2–2.1)	1	1.4 (0.4–5.0)	2.6 (0.5–15.2)	1	0.4 (0.2–1.1)	1	0.6 (0.3–1.4)	1	0.3 (0.1–1.2)	0.6 (0.2–1.7)
The staff and the elderly should have a continuous dialogue regarding the desire for self-determination among the elderly	1	2.2 (0.8–5.5)	1.7 (0.3–9.4)	1	0.7 (0.1–4.5)	1	3.1 (0.9–11.0)	1.4 (0.4–5.4)	1	1.5 (0.4–5.6)	1.4 (0.2–10.3)	1	0.9 (0.3–3.1)	1	<b>0.3</b> ( <b>0.1–0.8</b> )	1	0.7 (0.2–3.0)	1.1 (0.3–4.3)
It is important that the working conditions of the staff is taken into consideration when decisions are made about self-determination of the elderly	1	1.3 (0.5–3.6)	<b>0.1</b> ( <b>0.0–0.4</b> )	1	0.9 (0.2–5.3)	1	1.1 (0.3–3.9)	0.4 (0.1–2.2)	1	3.0 (0.3–28.7)	5.7 (0.4–79.9)	1	0.4 (0.1–1.3)	1	0.5 (0.2–1.3)	1	1.2 (0.3–5.0)	0.6 (0.2–2.7)
To support self-determination is a matter of getting to know the specific needs and desires of the individual elderly	1	<b>4.7</b> ( <b>2.3–9.9</b> )	<b>16.1</b> ( <b>1.9–98.3</b> )	1	0.5 (0.5–2.3)	1	1.6 (0.5–4.7)	2.6 (0.8–8.6)	1	0.8 (0.2–2.3)	0.6 (0.1–3.0)	1	1.3 (0.5–3.6)	1	0.5 (0.3–1.1)	1	0.3 (0.1–1.1)	0.6 (0.2–1.9)

One model for each statement, and each model containing the same potential determinants.

Relations expressed as odds ratios (OR) with 95% confidence intervals (95% CI).

Statistically significant relations are marked by bold numbers.

The results of the 7 regression models on opinions on autonomy of the older person are shown in Table 5. In particular, staff with a late conventional value system, but also those with middle conventional value systems, agreed more strongly than staff with early conventional value systems to the statement implying that autonomy should be founded on the specific needs and desires of the individual elderly. The late conventional value system was significantly related to a reluctance of letting the staff's working conditions influence decisions about the self-determination of the older persons.

To allow the older person to do whatever they like was less supported among middle and older staff (compared to younger staff), among staff working in nursing homes (compared to those working in home care), and among staff with 5–10 years of working experience (compared to those with less than 5 years of experience).

Staff with high school or university education, in comparison to those with elementary school only, was more likely to think that issues of autonomy must take into consideration the needs of both the staff and the elderly. A dialogue between the older person and the staff in matters regarding self-determination was less supported by staff working in nursing homes than among those working in home care.

## Discussion

Three distinct value systems were identified in the study sample. The relative degree of differentiation between value clusters suggested that these value systems were characteristic for individuals at early, middle and late conventional stages of ego development. More than half of the study sample had a predominantly early conventional value system, while less than 10% showed a late conventional value system. Compared to socio-demographic and occupational factors, the value systems had stronger predictive impact on the staff's views on care ethics and on participation and autonomy of the elderly. The views among staff with early conventional value system were to a large extent related to strict rules, routines, their own working conditions, and how they would like to be cared for as old, while the views among those with middle, and, in particularly, late conventional value systems were more based on collaboration between

the older person and the staff, on individualization and the needs and preferences of the elderly. It is concluded that staff at late conventional stages of ego development show value priorities that are most in accordance with the aim of optimizing the older persons' exercise of autonomy and minimizing the exercise of paternalism, which is stated in the Swedish Health and Medical Services Act (SFS, 1982: 763).

### *Methods and Analyses*

The identification of value systems and the classification of the individual's value system were accomplished by pattern recognition statistics and probability calculations, and the hierarchical arrangement of the value systems was based on quantification of the ability to differentiate between value clusters. This analytical approach was chosen rather than to construct content-based qualitative classification criteria that are bound to be more or less subjective due to semantic ambiguities, intra-disciplinary prejudices and/or cultural biases. Most other methods applied in studies of adult development focus on one or a few qualitative features characteristic at different stages of development. By grouping the individuals according to the statistical probability of belonging to identified response patterns, the categorization procedure is less affected by interpretation biases.

A limitation of this analytical approach is that it might be considered as imperviously complicated with several steps of multivariate statistics and coordination of different systems, i.e. one identification system, one classification system, one hierarchical arrangement system and one "good care" system. However, the analytical design seems justified since multivariate statistics are the most appropriate tools when investigating multivariate issues where a number of variables might interact in complex manners.

The response rate was 58% in the present study. This has at least two implications for the interpretations of the result. First, the number of distinct value systems among nursing assistants and nurses' aides might have been underestimated. Secondly, the relative frequency of individuals with early, middle and late conventional value systems might be biased. Since pre-conventional individuals are the least likely to participate in any kind of voluntary survey (Loevinger 1998), one might speculate that a higher response rate could have revealed also a pre-conventional value

system. People with late conventional value systems are known for their conscientiousness and are probably the sub-group in which the response rate is the highest (Sjölander et al. 2014; Loevinger 1998), implying that the frequency of individuals with such value systems might be overestimated in relation to the size of the sub-groups with early and middle conventional value systems.

### *Hierarchical Arrangement of Value Systems, and Their Relation to Stages of Ego Development*

In a previous study, using a similar test of value systems, it was found that the identified value systems were significantly correlated to stage of ego development (Sjölander et al. 2014). This is in agreement with observations of others demonstrating significant association between stages of ego development and value systems (Helson & Wink 1987; Loevinger & Blasi 1976; Torbert 2004; Westenberg et al. 1998). Although the value systems identified in the present study were not explicitly validated according to ego development measures, such as The Washington University Sentence Completion Test (Loevinger & Hy 1996), the hierarchically arranged sequence of value systems conforms to general developmental principles and was supported by value priorities characteristic at different stages of ego development (Cook-Greuter 1999; Loevinger & Blasi 1976; Loevinger & Hy 1996; Torbert 2004; Westenberg et al. 1998). Thus, the hypothesis that nursing assistants and nurses' aides show differently developed value systems was supported by the present results.

### *Determinants of "Good Care"*

The ethical principal of equality is the fundament on which the Swedish health care system has been constructed. With respect to the equal value of all people it should provide the citizens with the best possible care and treatment based on each individual's dignity and needs (SFS, 1982: 763). Over the last couple of decades there has been an increasing ambition to meet the individuals' desire to take an active part in treatment decisions and the care giving processes. This has necessitated modifications of how the equality principle is interpreted and concretized. A system based on fixed routines where general treatment and care programs were exclusively

decide and delivered by health care professionals has gradually been forced to change in order to meet the citizens' demand for participation and individualization.

There are obviously a large number of factors of importance for the quality of care provided through the health care system, e.g. economic conditions, housing facilities, access to technical aids, ambitions in guidelines and legislations, and level/quality of education. One factor that has become more important, concomitantly with the citizens' increasing demand for participation in, and individualization of, the treatment and caring processes, is the personality characteristics of those working in the health care system. For instance, staff with more developed interpersonal cognitive complexity, i.e. ability to perceive others in complex and personalized ways, are more empathic and have an improved capacity to understand the perspectives of others and to relate to a care taker in a more person-centered way (Grosch et al. 2011; Juujärvi et al. 2012; Medvene et al. 2006).

The finding of the present study support these results since staff with more developed value systems were more likely to appreciate the preferences for autonomy and participation among the older persons, and to put priority to dialogue and collaboration with the older person in the decision making process. In addition, our results indicate that there is a challenging discrepancy between the value system of staff with early conventional meaning-making structures, who were in majority in the present study population, and the demand for participation and individualization among older people and policy makers. Taken together, the present data corroborate the hypothesis that less developed value systems are related to a more paternalistic view on good care, whereas more developed value systems are characterized by higher priority to dialogue, autonomy, and preferences expressed by the older persons.

There is no doubt that education is an important determinant of professionalism among health care staff. But that does not necessarily imply that the education provides health care professionals with competencies that fully match the demands of the care takers. The present results indicate that the level of education was unrelated to individualization and appreciation of the preferences of the older people in the care process. Instead, staff with high school education, which is the most common

level of education among Swedish nursing assistants, were in favor of standardization of routines that should be applied without exceptions. These findings raise questions about the focus and the content of the Swedish educational curriculum for nursing assistants.

To what extent may the individual's value system be developed through education? Research in adult development clearly show that it is possible to improve one's ability to understand others' perspectives and to get a more complex understanding of oneself, and the reality and the world we are a part of. However, there is still weak evidence that such development is substantially bolstered by educational programs (Manners et al. 2004; Pfaffenberger 2005). Thus, for most of us it seems that our stage of personal development remains rather stable after we have passed early adulthood (Grosch et al. 2011), which does not of course mean that it would be impossible to influence meaning-making systems in a systematic way by future innovations in e.g. educational science.

### *Predictive Validity of Value Systems*

One of the main findings of the present study is that the value systems, in comparison to socio-demographic and occupational factors, showed a stronger relationship with the staff's views on care ethics, participatory care and autonomy of the older person. Thus, the hypothesis that the value systems of nursing assistants' and nurses' aides' is a good predictor of their view on good care for older persons is supported by the present study. This result is in conformity with previous research demonstrating significant predictive validity of individual's values system. In the study by Sjölander et al. (2014), value systems were significantly more related than gender, age, level of education and occupation, to people's attitudes towards refugees and views on discrimination and integration.

Thus, although the predictive validity of the value systems seem to be convincing, it has still to be investigated to what extent the idealized value systems, investigated in the present study, relate to differences in actual behavior. One's stage of ego development, however, has been demonstrated to predict behaviors and actions related to helping, responsibility, and conformity (Loevinger 1979; Torbert 2004), and since ego development and value systems are correlated, one would expect significant relations also between value systems and behaviors. Yet, since the extent to which

an idealized value system translates into behavior is influenced by circumstances such as social context, organization and leadership. Future studies aimed at clarifying the relation between idealized and realized value systems should include the effects of situational and environmental factors.

### *Cultural Value System and Leadership*

A significant feature among people at early conventional stages of development is that they internalize collective conventions, norms and values without much consideration (Cook-Greuter 1999; Loevinger & Blasi 1976; Loevinger & Hy 1996; Torbert 2004; Westenberg et al. 1998). Their value system is largely a mirror image of the value system of the group to whom they belong, and their action logic is focused on social relations, stability and harmony within the in-group, e.g. the staff or the working group. For example, as shown in the present study, staff with early conventional value systems find it important to strongly consider the working conditions of the staff in issues concerning the autonomy of the older person. This is related to a dualistic world view where firm distinctions are made between “we” and “them,” staff and patients, women and men, etc. (Cook-Greuter 1999; Loevinger & Blasi 1976; Loevinger & Hy 1996; Torbert 2004; Westenberg et al. 1998).

In the early conventional mind frame, leadership has a prioritized position, and a respected leadership should be authoritative, concrete and rule-based (Loevinger & Blasi 1976; Torbert 2004). Thus, a suitably adapted leadership is crucial in an organization dominated by individuals with early conventional value systems. In the old age care organization studied in the present investigation, a leadership that would be respected, needs to promote social relations and provide concrete guidance in the daily care (Torbert 2004). In most Swedish old age care organizations the interaction between the nurse in charge and the staff is infrequent and often restricted to communication on demand and on weekly meetings. This is consistent with a large survey showing that a majority of staff working in old age care lacked perceived support from their managers (Trydegård 2012).

To obtain improved emphases on the needs and conditions of the older person it seems important to create a local environment where the staff and the elderly are included in the same collective structure, i.e. to expand

the in-group affinity of the early conventional staff to embrace also the older people (cf. Torbert 2004). This might be achieved by applying rules and routines that promote a person-centred way of providing care, and to arrange activities where the staff and the older person may participate on equal terms. Admittedly, it is a delicate matter to establish routines which does not act as a straightjacket on staff with late conventional value systems that have more developed perceptions of person-centred and individualized care. A successful leadership in the care organization studied in the present investigation should identify staff with more diversified and developed value systems, and to recruit them to key positions where they may have a substantial impact on the cultural value system that is guiding their working groups.

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