

# Safeness and Treatment Mitigate the Effect of Loneliness on Satisfaction With Elderly Care

Petri J. Kajonius, PhD Candidate<sup>\*,1,2</sup> and Ali Kazemi, PhD<sup>2</sup>

<sup>1</sup>Department of Psychology, University of Gothenburg, Sweden. <sup>2</sup>School of Health and Education, University of Skövde, Sweden.

\*Address correspondence to Petri J. Kajonius, PhD Candidate, Department of Psychology, University of Gothenburg, PO Box 500, SE 405 30 Göteborg, Sweden. E-mail: [petri.kajonius@psy.gu.se](mailto:petri.kajonius@psy.gu.se)

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Maximizing satisfaction among the older persons is the goal of modern individualized elderly care and how to best achieve this is of relevance for people involved in planning and providing elderly care services.

**Purpose of the Study:** What predicts satisfaction with care among older persons can be conceived as a function of process (how care is performed) and the older person. Inspired by the long-standing person versus situation debate, the present research investigated the interplay between person- and process-related factors in predicting satisfaction with elderly care.

**Design and Methods:** A nationwide sample was analyzed, based on a questionnaire with 95,000 individuals using elderly care services.

**Results:** The results showed that person-related factors (i.e., anxiety, health, and loneliness) were significant predictors of satisfaction with care, although less strongly than process-related factors (i.e., treatment, safeness, and perceived staff and time availability). Among the person-related factors, loneliness was the strongest predictor of satisfaction among older persons in nursing homes. Interestingly, a path analysis revealed that safeness and treatment function as mediators in linking loneliness to satisfaction.

**Implications:** The results based on a large national sample demonstrate that the individual aging condition to a significant degree can be countered by a well-functioning care process, resulting in higher satisfaction with care among older persons.

**Key words:** Person-centered care, Elderly care, Individualized care, Person, Situation, Satisfaction, Loneliness

Modern elderly care is characterized by a strong emphasis on the older individual, knowing and documenting his or her needs, preferences, and life-story. Individualized care, also called person-centered care, has for the last decade been the dominant ideology in elderly care (Swedish National Board of Health and Welfare, 2012). Keeping the older person satisfied in a supportive care relationship is the ultimate goal of the individualized care approach.

Thus, an important question that arises is whether there are some key predictors of satisfaction with care, especially in a market where the older person is free to choose among care services (Bergmark, Parker, & Thorslund, 2000). This knowledge would facilitate for policy makers and enable field practitioners to achieve and maintain a high level of satisfaction among older persons using home-based or nursing home care services.

Taking position in the long-standing debate of the person versus the situation (Funder, 2008; Mischel, 2009), we set out to investigate the interplay between personal (i.e., the aging condition) and situational (i.e., the care process) factors in explaining satisfaction with care from the standpoint of older persons. In a recent study, Kajonius and Kazemi (2014) investigated the relative impact of structural and process variables on satisfaction with care and reported that the care process more strongly predicted older persons' satisfaction with care. To our knowledge, no previous studies have made use of a large and nationwide sample to answer how person-related factors and the characteristics of the care process contribute to satisfaction with elderly care.

### Modern Elderly Care

Sweden has a renowned high satisfaction in elderly care. Swedish elderly care is organized and provided in home care and nursing homes (Davey, Malmberg, & Sundström, 2013). In its efforts to promote individualized care nationwide, the Swedish government has during the last decade emphasized the importance of documentation concerning older persons' individual conditions and activities (Öhlén, Forsberg, & Broberger, 2013). The downside is that care workers have less time to interact with the older persons. The future prospects are that the old age dependency ratio (the number of people working divided by the number being supported) will further increase from 26% to 50% by 2050 (Swedish National Board of Health and Welfare, 2012). Governments, policy makers, and care workers will in the days ahead be even more pressured to take measures for maximizing satisfaction with elderly care.

### Individualized Care

The modern care ideology shares its emphasis on safety and respectful treatment with humanistic psychology (Rogers, 1985). The idea of individualized care has been further fueled by the increasing individualism in Western societies at large (Inglehart & Welzel, 2005). Individualism is defined as the tendency to focus on individual person's rights and opportunities (Hofstede, 2003). In elderly care, this manifests itself in the ideology of individualized care.

The older individual is viewed as a person, not just as an object in need of society's health apparatus. The starting point is to know the person; being person-centered and not system-centered, as initially formulated by Kitwood (1997) and subsequently supported and developed by McCormack (2004). Common to most current conceptualizations of elderly care is that the care organization exists to satisfy the needs of the older person, and not the other way around.

The primary needs are to feel safe and to be treated respectfully as a person (Edebalk, Samuelsson, & Ingvad, 1995). The older person is seen as a customer of societal services and the care workers as the supportive helpers.

Most of the existing measures on quality in individualized care have the older person's satisfaction in focus (Edvardsson & Innes, 2010). The Client-Centered Care Questionnaire (CCCQ; De Witte, Schoot, & Proot, 2006) includes items such as personal wishes, personal needs, autonomy, being listened to, and being treated with respect. One of the most frequently used measures is the 64-item PDC scale (Person-Directed Care), developed by White, Newton-Curtis, and Lyons (2008). This inventory consists of five dimensions, including both personal and care process factors, that is, knowing the person, autonomy, personhood, comfort care, and support relations.

Stewart (2001) suggested that it must be the older person who should be the judge of quality. A recent study on the star-rating system of nursing homes seems to suggest that quality ratings in elderly care should always include the older persons' satisfaction (Williams, Straker, & Applebaum, 2014), or the efficiency of individualized care will be misrepresented. Asking the older person about his or her global or overall satisfaction with care has become the most important measurement of quality and is used in nationwide surveys (Swedish National Board of Health and Welfare, 2012). Global feelings of satisfaction with elderly care have been demonstrated to be related to the feeling of being at ease or feeling safe at home as well as being treated well and not feeling alone (cf. Edvardsson, Sandman, & Rasmussen, 2008). Older persons tend to prefer person-centered care and like to be asked about their satisfaction (Little et al., 2001).

### The Person and the Care Process

In predicting satisfaction with elderly care, the older person and the care process can be viewed and tested as two separate potential sources of influence. This view is based on the long-standing person versus situation debate in social psychology (Mischel, 2009). This controversy pertains to whether personal attributes (i.e., traits, temperament, family background, or outlook on life) or situational contingencies are most influential in determining people's cognitions and reactions in various social encounters, and their relative importance and interplay in different contexts (Funder, 2008). However, these effects are not easy to disentangle. Much longitudinal research has shown that both aspects contribute strongly to perceived life satisfaction (Heller, Watson, & Hies, 2004). It is, however, not self-evident that previous results pertaining to prediction of life satisfaction is generalizable to domain-specific satisfaction such as

elderly care. There is a paucity of research concerning the interplay between personal predispositions and conditions and situational characteristics in explaining satisfaction with elderly care. Thus, the present research aims at filling the knowledge gap in this area.

### Person and Satisfaction

Responses from older people concerning their views about the care they receive are affected by how they feel about themselves. For example, severity of health condition is reported to be negatively associated with the satisfaction of relationships with nurses and staff (Otani, Waterman, & Dunagan, 2012). That is, the more ill the patients were, the more likely they were to dislike the care they received. Furthermore, studies on personal levels of self-esteem have been shown to affect various types of perceptions, including treatment (McMullin & Cairney, 2004; Twenge & Campbell, 2002). There is strong empirical support that up to 50% of global life satisfaction is dependent on person-related characteristics, specifically general anxiety (Sheldon & Lyubomirsky, 2007). General anxiety is a key personal trait explaining a wide range of perceptions such as experience of safeness, satisfaction with treatment, loneliness, and health status (Boomsma, Willemsen, Dolan, Hawkey, & Cacioppo, 2005; Larrabee, Engle, & Tolley, 1995; Mann, Birks, Hall, Torgerson, & Watt, 2006; Patrick & Hayden, 1999). A conclusion from this body of research is that personal feelings, conditions, and predispositions affect perceptions and evaluations of care services.

### Care Process and Satisfaction

Process is defined as all the acts and characteristics of caregiving, such as treatment and patient-caregiver interaction (Donabedian, 1988), but also as *how* care is performed. Senić and Marinković (2012) reported that among all factors measured to predict patient satisfaction at a clinic, the quality of the caring relationship between the professional and patient had the strongest impact. Fleishman (1997) demonstrated that the degree of older persons' compliance with treatment advice was influenced by the satisfaction of the care process—the more time and the more concern the caregiver invested, the higher the compliance and satisfaction among the older persons. Interpersonal competence is even more important than technical care competence, when it comes to evaluations of health care (Schirm, Albanese, & Garland, 1999). Furthermore, there are robust relationships between personal needs, process qualities, and various measures of satisfaction (e.g., Edvardsson & Innes, 2010). Drawing on these findings, the premise for the present study is that older persons' satisfaction with care is

affected by both the person and the care process. The question under investigation is their relative importance and how these two sources of influence are related.

### The Integration of Person and Process

The present study adheres to the approach of Mead and Bower (2000) who view individualized care as being formed by the interaction between the older person and the care process. In our view, the personal conditions of health and anxiety are the starting points for the individual's aging condition, characterized by vulnerability (i.e., being in need of aid). This progressive vulnerability among older persons has been shown to be equivalent to a feeling of loneliness and has been tapped by directly asking the older person whether and to what extent (s)he feels alone (Aartsen & Jylhä, 2011; Boomsma et al., 2005). Loneliness is directly related to levels of satisfaction—the more unprotected you feel, the less satisfied you are with your elderly care situation (Aartsen & Jylhä, 2011). Loneliness is also related to the key process variables in the context of elderly care, that is, the experience of being provided with safeness and dignified treatment (Mann et al., 2006, Routasalo & Pitkala, 2003), which in turn are considered to be main predictors of satisfaction with care (R. L. Kane & R. A. Kane, 2001).

### The Present Study

Previous studies have shown that structural factors (i.e., available resources, such as budget and staffing) predict satisfaction with care only marginally, whereas process factors (i.e., how care is performed in terms of respect, influence, and information) predict satisfaction with care to a greater extent (Bergman, Lundberg, & Spagnolo, 2012; Kajonius & Kazemi, 2014). The question posed in the present study is whether *personal attributes and conditions* or *process-related* factors account for the most variance in satisfaction with care. More specifically, does satisfaction mostly and primarily reside within the older persons themselves—as a function of individual factors such as self-rated health and loneliness, or does satisfaction mainly emanate from external factors that can be provided by caregivers—that is, the care process? Furthermore, the present study also aims at demonstrating how personal factors interplay with process-related factors in determining overall satisfaction with elderly care.

### Methods

#### Materials and Participants

The source of data was the Swedish National Board of Health and Welfare's annual reports called Open Comparisons

(2012). This was based on a 28-item questionnaire directed to a nationwide sample of older persons over 65 years using elderly care services. The latest available survey was conducted in 2012 and was sent out to 150,957 older persons in home care and nursing homes. The overall response rate from home care was 70% ( $n = 61,600$ ), and the overall response rate from nursing homes was 54% ( $n = 33,400$ ). Within home care, 76% of the older persons stated that they filled out the questionnaire themselves, while the corresponding percentage in nursing homes was only 39%, mainly due to worse health conditions. This could along with the generally low response rate potentially bias the representativeness of the results. However, previous studies on nonresponders in care settings show little or no differences in characteristics compared to responders (Lasek, Barkley, Harper, & Rosenthal, 1997). Also, an exploratory analysis showed only a very small negative effect on the older persons' overall satisfaction with care from having had help to fill out the questionnaire ( $d = 0.14$ ,  $p < .001$ ). In sum, elderly care units in all Swedish municipalities were represented in the 2012 Open Comparisons, making the sample nationally representative.

## Measurements

The single indicator in Open Comparisons that most directly tapped older persons' global satisfaction with care was "Overall, how satisfied are you with the home care?" or "Overall, how satisfied are you with the nursing home care?" These items were answered on 5-point Likert scales, ranging from "a very large extent" (5) "to a very small extent" (1). This measure was used as the dependent variable in this study. Using single items has proven to be successful and is increasingly used in psychological inquiries (Konrath, Meier, & Bushman, 2014; Lyubomirsky, King, & Diener, 2005; Nichols & Webster, 2013; Thalmayer, Saucier, & Eigenhuis, 2011).

Personal factors/characteristics were operationalized by using three items. Anxiety was tapped by "Are you affected by anxiety or fear?" and responses were obtained using a 3-point scale: (3) "yes, severely"; (2) "yes, lightly"; and (1) "no." Physical health was tapped by "How do you perceive your general health?" and responses were obtained using a 5-point Likert scale, ranging from (5) "very good" to (1) "very bad." Self-rated health is one of the most used single item measures in elderly care and has demonstrated construct as well as predictive validity, for instance, in predicting mortality (Jylhä, 2009). Self-reports of health and anxiety are of particular importance in understanding the relationship between the person and satisfaction with care, as they are used in evaluating older persons' eligibility for elderly care, consequently entitling them to home-based care or arranging transition to a nursing home. The third

item loneliness was tapped by "Are you often afflicted by loneliness?" using a 3-point scale: (3) "yes often," (2) "yes sometimes," and (1) "no." This item has been shown to encompass correlates of vulnerability in aging, implying a lack of impactful relationships, as well as low mood, reduced social activity, increased disability, and feelings of uselessness (Aartsen & Jylhä, 2011).

The characteristics of the care process were operationalized using four items in the national survey: "How safe do you feel at your nursing home/with your home care?" (Safeness); "Do the staff treat you in a good way?" (Treatment) (both of which were answered on 5-point Likert scales, ranging from (5) "a very large extent" to (1) "a very small extent"); "How easy is it to get in touch with the care staff when you need them?" (Staff availability); and "Do the staff usually have enough time for you?" (Time availability), ranging from (5) "a very large extent" to (1) "a very small extent." These latter two items were considered as prerequisites for safeness and treatment. Moreover, staff and time availability cannot be regarded as structural variables. That is, a nursing home could have plenty of staff, but the staff might after all be perceived as being unavailable by the older persons. This can happen, for instance, due to tasks of administration such as documentation, or when washing the dishes the staff could be talking to each other instead of interacting with the older persons.

## A Note on Methods

Collecting self-report data served the aim of tapping the older persons' psychological and subjective evaluations (i.e., how the care process was subjectively experienced by the older persons instead of collecting various objective data) in the present study. A potential limitation in research on satisfaction, pertaining to the issues of reliability and validity, is the use of self-reported questionnaires according to some critics (e.g., P. M. Podsakoff, MacKenzie, Lee, & N. P. Podsakoff, 2003). However, it has been demonstrated that even very short scales (down to one-item questions) still perform reasonably well and should be encouraged for gathering self-reported data (Konrath et al., 2014). Yarkoni (2010) demonstrated by a re-computation of all items from 203 personality scales, reduced into 181 items, that a reasonable validity still could be maintained. This does not mean that short scales are superior to longer scales with multiple indicators, but it grants credibility to national surveys which most often rely on single items for measuring theoretical constructs as the length of a questionnaire has been shown to be inversely related to response rate, and that the shorter scales are more cost-effective.

Path analysis was conducted using IBM SPSS AMOS v.22. Confidence intervals were intentionally omitted due

to the large sample sizes, since the *SEs* deviated less than or equal to 0.01 from the estimates. The outcome variable, overall satisfaction, was slightly skewed, however within recommended limits (<2.0). Moreover, it is also known that a strict normality assumption for *t*-tests and regressions is not a requirement when using large samples (i.e., >1,000) (Lumley, Diehr, Emerson, & Chen, 2002).

## Results

The descriptive statistics (means, standard deviations, and intercorrelations) are reported separately for home care (Table 1) and nursing homes (Table 2). Older persons in home care were more satisfied than in nursing homes, differing with approximately one third of a standard deviation,  $t(38552) = 32.0$ ,  $d = 0.33$ , indicating that nearly 63% of older persons in home care are above the average (in terms of perceived satisfaction) for older persons living in nursing homes. All tests were significant ( $p < 10^{-6}$ ). Anxiety and loneliness were found to be higher ( $d = 0.28$  and  $d = 0.20$ , respectively), whereas health was found to be lower ( $d = -0.24$ ) among older persons residing in nursing homes as compared to older persons in home care. Furthermore, the staff in nursing homes were perceived by the older persons to have less time than the staff in home care ( $d = -0.33$ ). The quality of interpersonal treatment was considered as being

lower in nursing homes than in home care ( $d = -0.37$ ), while in contrast, safeness and staff availability were found to be higher ( $d = 0.10$  and  $d = 0.20$ , respectively). The purpose of this study was not to compare the variables across home care and nursing home settings, but these results illustrate interesting differences in these two contexts.

## Personal Factors

Physical health and anxiety are two fundamental individual condition characteristics as they form the basis for the type of assistance an older person is entitled to, that is, home-based care or nursing home. Overall, anxiety, health, and loneliness correlated moderately with satisfaction with care, as well as with all care process factors, as summarized in Tables 1 and 2. Noteworthy, anxiety and loneliness in particular were highly correlated, in both home care and nursing homes, implying the vulnerability of the aging condition. Furthermore, loneliness had a higher correlation with overall satisfaction in nursing homes as compared to home care.

## Care Process

All process factors (i.e., the perceptions of interpersonal treatment, the sense of safeness provided by the caregivers, and the perceived availability of the staff and their

**Table 1.** Correlations Between Study Variables for Home Care

	M	SD	1	2	3	4	5	6	7
1 Anxiety	1.55	0.62							
2 Health	3.07	0.88	-.38						
3 Loneliness	1.71	0.71	-.42	-.23					
4 Treatment	4.71	0.55	-.19	.18	-.18				
5 Safeness	4.24	0.82	-.28	.30	-.31	.43			
6 Staff availability	4.03	0.94	-.15	.16	-.17	.49	.44		
7 Time availability	4.10	0.99	-.21	.24	-.24	.50	.44	.42	
8 Overall Satisfaction	4.31	0.79	-.20	.24	-.20	.56	.58	.53	.56

Note:  $N = 52,890$ . All correlations are significant at  $p < .001$  (two-sided).

**Table 2.** Correlations Between Study Variables for Nursing Homes

	M	SD	1	2	3	4	5	6	7
1 Anxiety	1.73	0.67							
2 Health	2.85	0.97	-.41						
3 Loneliness	1.85	0.72	.42	-.28					
4 Treatment	4.49	0.64	-.23	.21	-.30				
5 Safeness	4.31	0.83	-.29	.25	-.36	.54			
6 Staff availability	4.21	0.86	-.20	.20	-.31	.52	.53		
7 Time availability	3.79	0.97	-.24	.26	-.35	.53	.52	.53	
8 Overall Satisfaction	4.09	0.89	-.29	.27	-.41	.56	.69	.58	.58

Note:  $N = 22,448$ . All correlations are significant at  $p < .001$  (two-sided).

time) were highly correlated with satisfaction with care. As depicted in Tables 1 and 2, safeness and loneliness were more strongly correlated with overall satisfaction in nursing homes than in home care. Similarly, in general, higher correlations with staff availability were found in nursing homes. Nursing homes are expected to provide availability of caregivers around the clock to enable provision of safeness, dignified treatment, and dispersing loneliness.

### The Interplay Between Person and Process

A hierarchical regression analysis on satisfaction in home care was performed in two steps. In the first step, the person-related variables (i.e., self-rated anxiety, health, and loneliness), and in the second step, the care process variables (i.e., perceived treatment, safeness, staff- and time availability) were entered. Person-related variables accounted jointly for a significant amount of variance in satisfaction (i.e., 9%). Process variables accounted for an additional 45% of variance (Table 3). Similarly, a hierarchical regression analysis on satisfaction in nursing homes, presented in Table 4,

revealed the same pattern, although more variance were explained in the first step by the person-related factors (i.e., 21%), and process-related variables accounted for an additional 39%. Thus, more total variance in satisfaction was explained in nursing homes as compared to home care. However, screenings of independent beta-weights of single predictors in both analyses revealed some interesting patterns and differences. Treatment had a larger impact on satisfaction in home care, whereas loneliness and safeness had a larger impact in nursing homes. Overall, with the exception for loneliness in nursing homes, the magnitudes of beta-weights were significantly reduced when controlling for the care process variables in the second step of both regression analyses.

Data were further analyzed with the principal aim of detecting how satisfaction with care was related to person- and process-related factors using an integrated path model (Figure 1). To maintain parsimony in the empirical model, staff and time availability were considered as prerequisites for safeness and treatment and were thus not included in the model. The path describes how the aging condition starts with anxiety increasing with deteriorating health. These are related to loneliness which in turn is assumed to have a direct relationship with overall satisfaction with care. The mediators in this model were safeness and treatment linking the person-related factors (left side of the diagram) with satisfaction with care (right side of the diagram). The nursing home data were chosen for the path analysis.

When analyzed separately with the Sobel test, there was an indirect effect of loneliness on overall satisfaction via safeness ( $\beta = -.23, p < .01^{-6}$ ), which represents a large effect,  $K^2 = 0.25$ . The mediating ratio was 56% (the nonstandardized indirect effect divided by the total effect). There was also a smaller indirect effect of loneliness on overall satisfaction linked by treatment ( $\beta = -.14, p < .01^{-6}$ ), which represents a medium effect,  $K^2 = 0.15$ . The mediating ratio was 35%. Analyzing the mediators jointly in the path analysis, the direct effect dropped from  $\beta = -.42$  to  $\beta = -.16$ , indicating a strong partial mediation. This mediation illustrates that a well-functioning care characterized by the older persons feeling safe and well treated can be an effective counter-measure to predicament of aging in terms of loneliness. In sum, the model summarizes how the conditions of aging relate to satisfaction with care, and the results show that process factors effectively can counter the negative effects of aging.

### Discussion

The present investigation, to our knowledge, is one of the first to quantify and report on the relative impact of personal conditions of older persons and care process-related

**Table 3.** Hierarchical Regression Analysis in Home Care

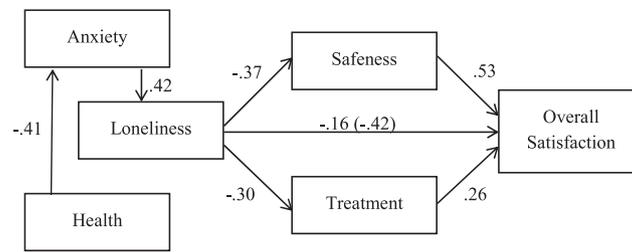
		Step 1	Step 2
	$R^2$	$\beta$	$\beta$
Step 1 (person)	.09		
Anxiety		-.08	.01
Health		.18	.03
Loneliness		-.13	-.02
Step 2 (process)	.54		
Treatment			.25
Safeness			.28
Staff availability			.21
Time availability			.22

Note:  $F_{\text{change}} = 10171.2, p < .001$ . All coefficients  $>.01$  are significant at  $p < .001$ .

**Table 4.** Hierarchical Regression Analysis in Nursing Homes

		Step 1	Step 2
	$R^2$	$\beta$	$\beta$
Step 1 (person)	.21		
Anxiety		-.10	-.02
Health		.16	.04
Loneliness		-.33	-.10
Step 2 (process)	.60		
Treatment			.14
Safeness			.39
Staff availability			.17
Time availability			.17

Note:  $F_{\text{change}} = 4239.3, p < .001$ . All coefficients are significant at  $p < .001$ .



**Figure 1.** The integrated person-process path model.  $N = 19,097$ . All regressions in the model are significant,  $p < .01^{-6}$ , and confidence intervals are within 0.01 of the estimates.

factors on satisfaction with elderly care using a nationwide sample. The results of this study provide compelling evidence in favor of care process factors (i.e., feeling safe and being treated well by staff that are perceived to be available) as strong predictors of satisfaction with care over and above person-related factors (i.e., anxiety, health, and loneliness). Using other indicators of the care process, present findings support previous results reported by [Kajonius and Kazemi \(2014\)](#) who showed that care process factors in terms of influence, respect, and information outperform structural factors (e.g., budget and staffing) in predicting satisfaction with care.

Even though the care process factors explain a significant amount of satisfaction with care, individual differences cannot completely be omitted from the equation. The older person with his or her characteristics will always be an influential part in forming the caring relationship with the caregiver. This person-to-person dynamic is something skillful caregivers must take into account when providing daily care to the older persons.

Another intriguing and novel aspect of the present study is the demonstration of the interplay between person- and care process-related factors in determining satisfaction using path analysis. These findings indicate that providing a safe caring environment and treating respectfully mitigate the effect of loneliness on satisfaction. Put differently, the lonelier the older person feels, the less satisfied (s)he tends to be with the care (s)he is receiving. However, this association is significantly weakened to the extent that the older person's needs for safeness and respectful treatment are met. Availability of staff and time are the fundamentals for providing individualized care. Also, as the energy and strength of the older persons needed for interaction with others diminishes, the responsibility and demands on the availability of caregivers increase. The present data suggest that in providing a safe and satisfying care process, available staff with sufficient time is a prerequisite. Absenteeism of care workers has been shown to have adverse effects on a number of quality indicators ([Castle & Ferguson-Rome, 2014](#)), and the results of our study imply that satisfaction with care can be added to that list.

Relevant to the person-situation debate, another interesting finding is the observed differences in overall satisfaction between home care and nursing homes, suggesting two different types of personal needs in these settings. Older people in nursing homes have weaker health and feel satisfied with the care when they feel safe and not lonely. In contrast, in home care satisfaction is anchored in the way they are treated, and loneliness is not considered as important. Older persons, while still living at home and still being somewhat healthy, have more control over their lives and the care they receive, which results in higher satisfaction with care. In other words, the older *person* in home care is in control of his aging *situation*. However, as the process of aging goes further, the power of the care situation increases and the older person has increasingly less influence, eventually moving to a nursing home. Our data support this shift in focus from person towards situation in that the impact of safeness and treatment was shown to be higher in nursing homes than in home care. This view of increased situational impact is confirmed by earlier findings in behavioral genetics reporting an increased effect of environment on locus of control in late life ([Johansson et al., 2001](#)). However, it should be emphasized that this issue requires further analyses and awaits future investigations. The person-situation debate in the context of elderly care in the light of the present results (person-process integration) offers suggestions for several directions of research into this new territory.

We cannot establish any causal effects in the present research, and mediation analyses based on nonexperimental data has been discussed to be biased (e.g., [Bullock, Green, & Ha, 2010](#)). Thus, we suggest that future research by using an experimental approach devise field experiments (e.g., intervention studies) and more rigorously test the causal and mediating effects of care process factors on loneliness and satisfaction. Employing an experimental approach would strengthen the internal validity of the findings.

Another suggestion for future research is to target the issue of loneliness among older persons in nursing homes as they somewhat counter-intuitively report higher levels of loneliness than their peers in home care. Specifically,

future research should identify empowerment strategies for dispersing loneliness among this category of older persons. The issue of empowerment is related to the notion of user orientation (i.e., individualized assisting behaviors building on active partnership in planning and implementation of care) in the context of elderly care which until now has only been discussed in a few studies (Kazemi & Kajonius, 2014; Swedish National Board of Health and Welfare, 2012).

## Implications

Some important implications of the present findings for policy in the context of elderly care are noteworthy. Data clearly indicated that older persons in home care were more satisfied with the care they received than their peers in nursing homes. Any policy making efforts aiming at increasing the level of satisfaction with care among nursing home residents may prove to be fruitless as the higher level of satisfaction among older persons in home care is related to better health and a higher degree of autonomy, and thus not be amenable to substantial improvements.

A common conception is that older persons in nursing homes feel less lonely than their peers in home care. However, the present data revealed the opposite to this conception. Feelings of loneliness among residents in nursing homes were much more frequent than among older persons in home care. Thus, it is useful knowledge for policy makers that transitions to nursing homes may result in positive outcomes for the older persons, such as safeness, but that this transition will most probably have adverse effects on feelings of loneliness.

The issue of safeness was showed in the present study to be of paramount concern for alleviating adverse effects of loneliness. If an older person is moved to a nursing home for the sake of safeness, what is important for the older person's perception of safeness? Number of staff, their perceived availability (i.e., how easy it is to get in touch with the staff), and whether they are perceived to have and invest enough time with the older persons are some key factors. However, in times of economic turmoil, employment of care staff may decrease. Thus, in order to maintain an acceptable level of safety for nursing home residents, policy efforts (e.g., training programs for care staff) should be directed towards identifying strategies to increase staff availability and investment of time in meeting the needs of the older persons within the existing financial resources.

This study started out by describing the individualistic focus in modern elderly care. Satisfying the older person, as well as knowing and recording all the details and activities of the person, has become the standard working method in person-centered or individualized care. This has

gained support and has arguably improved quality of care. However, these well-intended rules and regulations aimed at increasing quality are also burdening caregivers. For instance, the documentation requirements take time and potentially reduce staff availability to the older persons. Based on our findings pertaining to the effects of time and staff availability on satisfaction with care, this development may be seen as misdirected in some sense and may also even at times be counterproductive to the conditions of the older persons and the aging process. At the heart of individualized care is the caring relationship where the caregiver invests time and engagement in the older person. Regulations are best conceived as means to realize the ultimate aim of proving the care the older person needs and desires. Aging, in our view, should be conceived as a condition slowly overpowering the older person. However, as clearly demonstrated in this study, this process of degeneration characterized by ill-health, feelings of anxiety and loneliness can effectively be mitigated within a well-functioning care process which provides the essentials of elderly care, that is, safeness and dignified treatment, which stresses the importance of adopting a person-process integrated approach in elderly care.

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## References

- Aartsen, M., & Jylhä, M. (2011). Onset of loneliness in older adults: Results of a 28 year prospective study. *European Journal of Ageing*, *8*, 31–38. doi:10.1007/s10433-011-0175-7
- Bergman, M. A., Lundberg, S., & Spagnolo, G. (2012). *Public procurement and non-contractible quality: Evidence from elderly care*: Umeå, Sweden: Umeå University.
- Bergmark, A., Parker, M. G., & Thorslund, M. (2000). Priorities in care and services for elderly people: A path without guidelines? *Journal of Medical Ethics*, *26*, 312–318. doi:10.1136/jme.26.5.312
- Boomsma, D. I., Willemsen, G., Dolan, C. V., Hawkey, L. C., & Cacioppo, J. T. (2005). Genetic and environmental contributions to loneliness in adults: The Netherlands twin register study. *Behavior Genetics*, *35*, 745–752. doi:10.1007/s10519-005-6040-8
- Bullock, J. G., Green, D. P., & Ha, S. E. (2010). Yes, but what's the mechanism? (Don't expect an easy answer). *Journal of Personality and Social Psychology*, *98*, 550–558. doi:10.1037/a0018933

- Castle, N. G., & Ferguson-Rome, J. C. (2014). Influence of nurse aide absenteeism on nursing home quality. *The Gerontologist*. doi:10.1093/geront/gnt167
- Davey, A., Malmberg, B., & Sundström, G. (2013). Aging in Sweden: Local variation, local control. *The Gerontologist*, *54*, 525–532. <http://dx.doi.org/10.1093/geront/gnt124>
- De Witte, L., Schoot, T., & Proot, I. (2006). Development of the client-centred care questionnaire. *Journal of Advanced Nursing*, *56*, 62–68. <http://dx.doi.org/10.1111/j.1365-2648.2006.03980.x>
- Donabedian, A. (1988). The quality of care. How can it be assessed? *JAMA*, *260*, 1743–1748. <http://dx.doi.org/10.1001/jama.1988.03410120089033>
- Edebalk, P. G., Samuelsson, G., & Ingvad, B. (1995). How elderly people rank-order the quality characteristics of home services. *Ageing and Society*, *15*, 83–102. <http://dx.doi.org/10.1017/S0144686X00002130>
- Edvardsson, D., & Innes, A. (2010). Measuring person-centered care: A critical comparative review of published tools. *The Gerontologist*, *50*, 834–846. <http://dx.doi.org/10.1093/geront/gnq047>
- Edvardsson, D., Sandman, P. O., & Rasmussen, B. (2008). Swedish language Person-centred Climate Questionnaire - patient version: Construction and psychometric evaluation. *Journal of Advanced Nursing*, *63*, 302–309. <http://dx.doi.org/10.1111/j.1365-2648.2008.04709.x>
- Fleishman, R. (1997). Non-medical predictors of quality of care of hypertension in elderly patients. *International Journal of Health Care Quality Assurance*, *10*, 107–116. <http://dx.doi.org/10.1108/09526869710167021>
- Funder, D.C. (2008). Persons, situations and person-situation interactions. In O. P. John, R. Robins, & L. Pervin (Eds.), *Handbook of personality* (3rd ed. pp. 568–580). New York: Guilford.
- Heller, D., Watson, D., & Hies, R. (2004). The role of person versus situation in life satisfaction: A critical examination. *Psychological Bulletin*, *130*, 574–600. <http://dx.doi.org/10.1037/0033-2909.130.4.574>
- Hofstede, G. (2003). *Culture's consequences*. Thousand Oakes, CA: Sage Publishing.
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge: Cambridge University Press.
- Johansson, B., Grant, J. D., Plomin, R., Pedersen, N. L., Ahern, F., Berg, S., & McClearn, G. E. (2001). Health locus of control in late life: A study of genetic and environmental influences in twins aged 80 years and older. *Health Psychology*, *20*, 33–40. <http://dx.doi.org/10.1037/0278-6133.20.1.33>
- Jylhä, M. (2009). What is self-rated health and why does it predict mortality? Towards a unified conceptual model. *Social Science & Medicine*, *69*, 307–316. <http://dx.doi.org/10.1016/j.socscimed.2009.05.013>
- Kane, R. L., & Kane, R. A. (2001). What older people want from long-term care, and how they can get it. *Health Affairs (Project Hope)*, *20*, 114–127. doi:<http://dx.doi.org/10.1377/hlthaff.20.6.114>
- Kajonius, P., & Kazemi, A. (2014). Structure and process quality as predictors of satisfaction with care. Manuscript submitted for publication.
- Kazemi, A., & Kajonius, P. (2014). User-oriented elderly care: A validation study in two different settings using observational data. Manuscript submitted for publication.
- Kitwood, T. (1997). *Dementia reconsidered: The person comes first*. Oxford: Oxford Press.
- Konrath, S., Meier, B. P., & Bushman, B. J. (2014). Development and validation of the Single Item Narcissism Scale (SINS). *PLoS ONE*, *9*, e103469. <http://dx.doi.org/10.1371/journal.pone.0103469.t004>
- Larrabee, J. H., Engle, V. F., & Tolley, E. A. (1995). Predictors of patient-perceived quality. *Scandinavian Journal of Caring Sciences*, *9*, 153–164. <http://dx.doi.org/10.1097/00001786-200110000-00005>
- Lasek, R. J., Barkley, W., Harper, D. L., & Rosenthal, G. E. (1997). An evaluation of the impact of nonresponse bias on patient satisfaction surveys. *Medical Care*, *35*, 646–652. <http://dx.doi.org/10.1097/00005650-199706000-00009>
- Little, P., Everitt, H., Williamson, I., Warner, G., Moore, M., Gould, C., ... Payne, S. (2001). Observational study of effect of patient centredness and positive approach on outcomes of general practice consultations. *BMJ (Clinical Research ed.)*, *323*, 908–911. <http://dx.doi.org/10.1136/bmj.323.7318.908>
- Lumley, T., Diehr, P., Emerson, S., & Chen, L. (2002). The importance of the normality assumption in large public health data sets. *Annual Review of Public Health*, *23*, 151–169. <http://dx.doi.org/10.1146/annurev.publhealth.23.100901.140546>
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, *131*, 803–855. <http://dx.doi.org/10.1037/0033-2909.131.6.803>
- Mann, R., Birks, Y., Hall, J., Torgerson, D., & Watt, I. (2006). Exploring the relationship between fear of falling and neuroticism: A cross-sectional study in community-dwelling women over 70. *Age and Ageing*, *35*, 143–147. <http://dx.doi.org/10.1093/ageing/afj013>
- McCormack, B. (2004). Person-centredness in gerontological nursing: An overview of the literature. *Journal of Clinical Nursing*, *13*, 31–38. <http://dx.doi.org/10.1111/j.1365-2702.2004.00924.x>
- McMullin, J. A., & Cairney, J. (2004). Self-esteem and the intersection of age, class, and gender. *Journal of Aging Studies*, *18*, 75–90. <http://dx.doi.org/10.1016/j.jaging.2003.09.006>
- Mead, N., & Bower, P. (2000). Patient-centredness: A conceptual framework and review of the empirical literature. *Social Science & Medicine* (1982), *51*, 1087–1110. [http://dx.doi.org/10.1016/S0277-9536\(00\)00098-8](http://dx.doi.org/10.1016/S0277-9536(00)00098-8)
- Mischel, W. (2009). From Personality and Assessment (1968) to Personality Science, 2009. *Journal of Research in Personality*, *43*, 282–290. <http://dx.doi.org/10.1016/j.jrp.2008.12.037>
- Nichols, A. L., & Webster, G. D. (2013). The single-item need to belong scale. *Personality and Individual Differences*, *55*, 189–192. <http://dx.doi.org/10.1016/j.paid.2013.02.018>
- Öhlén, A., Forsberg, C., & Broberger, E. (2013). Documentation of nursing care in advanced home care. *Home Health Care Management & Practice*, *25*, 169–175. <http://dx.doi.org/10.1177/1084822313490729>
- Otani, K., Waterman, B., & Dunagan, W. C. (2012). Patient satisfaction: How patient health conditions influence their satisfaction. *Journal of Healthcare Management/American College of Healthcare Executives*, *57*, 276–292.
- Patrick, J. H., & Hayden, J. M. (1999). Neuroticism, coping strategies, and negative well-being among caregivers. *Psychology and Aging*, *14*, 273–283. <http://dx.doi.org/10.1037/0882-7974.14.2.273>

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, *88*, 879. <http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Rogers, C. R. (1985). Toward a more human science of the person. *Journal of Humanistic Psychology*, *25*, 7–24. <http://dx.doi.org/10.1177/0022167885254002>
- Routasalo, P., & Pitkala, K. H. (2003). Loneliness among older people. *Reviews in Clinical Gerontology*, *13*, 303–311. <http://dx.doi.org/10.1017/S095925980400111X>
- Schirm, V., Albanese, T., & Garland, T. N. (1999). Understanding nursing home quality of care: Incorporating caregivers' perceptions through structure, process, and outcome. *Quality Management in Health Care*, *8*, 55–63.
- Senić, V., & Marinković, V. (2012). Patient care, satisfaction and service quality in health care. *International Journal of Consumer Studies*, *9*, 155–168. <http://dx.doi.org/10.1111/j.1470-6431.2012.01132.x>
- Sheldon, K. M., & Lyubomirsky, S. (2007). Is it possible to become happier? (And if so, how?). *Social and Personality Psychology Compass*, *1*, 129–145. <http://dx.doi.org/10.1111/j.1751-9004.2007.00002.x>
- Stewart, M. (2001). Towards a global definition of patient centred care. *BMJ (Clinical Research ed.)*, *322*, 444–445. <http://dx.doi.org/10.1136/bmj.322.7284.444>
- Swedish National Board of Health and Welfare. (2012). *Open Comparisons 2012. Vård och omsorg om äldre 2012*. Stockholm: Socialstyrelsen. LTAB.
- Thalmayer, A. G., Saucier, G., & Eigenhuis, A. (2011). Comparative validity of brief to medium-length Big Five and Big Six Personality Questionnaires. *Psychological Assessment*, *23*, 995–1009. <http://dx.doi.org/10.1037/a0024165>
- Twenge, J. M., & Campbell, W. K. (2002). Self-esteem and socioeconomic status: A meta-analytic review. *Personality and Social Psychology Review*, *6*, 59–71. [http://dx.doi.org/10.1207/S15327957PSPR0601\\_3](http://dx.doi.org/10.1207/S15327957PSPR0601_3)
- White, D. L., Newton-Curtis, L., & Lyons, K. S. (2008). Development and initial testing of a measure of person-directed care. *The Gerontologist*, *48*(Suppl. 1), 114–123. [http://dx.doi.org/10.1093/geront/48.Supplement\\_1.114](http://dx.doi.org/10.1093/geront/48.Supplement_1.114)
- Williams, A., Straker, J. K., & Applebaum, R. (2014). The nursing home five star rating: How does it compare to resident and family views of care? *The Gerontologist*. doi:10.1093/geront/gnu043
- Yarkoni, T. (2010). The abbreviation of personality, or how to measure 200 personality scales with 200 items. *Journal of Research in Personality*, *44*, 180–198. <http://dx.doi.org/10.1016/j.jrp.2010.01.002>