



ORIGINAL RESEARCH:
EMPIRICAL RESEARCH - QUANTITATIVE

Thriving among older people living at home with home care services—A cross-sectional study

Kristina Lämås EN, PhD, Associate Professor¹  | Karin Bölenius RN, PhD, Associate Professor¹ | Per-Olof Sandman RNT, Senior Professor^{1,2} | Ådel Bergland RN, Professor³ | Marie Lindkvist Statistician, Associate Professor⁴ | David Edvardsson RN, Professor^{1,5} 

¹Department of Nursing, Umeå University, Umeå, Sweden

²NVS, Department of Nursing, Karolinska institute, Stockholm, Sweden

³Lovisenberg Diaconal University College, Oslo, Norway

⁴Department of Statistics, USBE, and Epidemiology and Global health, Department of Public health and Clinical Medicine, Umeå University, Umeå, Sweden

⁵School of Nursing and Midwifery, La Trobe University, Melbourne, VIC, Australia

Correspondence

Kristina Lämås, Department of Nursing, Umeå University, Umeå, Sweden.
Email: kristina.lamas@umu.se

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Abstract

Aim: To explore the level of thriving and associated factors among older adults living at home with support from home care services.

Design: An exploratory, cross-sectional survey design.

Method: A sample of 136 participants (mean 82 years) responded to a survey about thriving, health, psychosocial and care-related factors in 2016. Descriptive analysis and multiple logistic regression analysis with a stepwise backwards elimination procedure were performed.

Result: The results showed that the level of thriving was relatively high among adults living at home with support from home care services, with dimensions concerning engaging in activities and peer relations and keeping in touch with people and places being rated the lowest. Regression analysis showed that participating in social relations and experiencing self-determination in activities in and around the house were associated with thriving.

Conclusion: Facilitating social relations and creating opportunities for self-determination seem necessary to support thriving among older adults living at home with support from home care services.

Impact: The findings in this study add important knowledge about place-related well-being when living at home with home care services.

KEYWORDS

aged, health, home care service, nursing, older adults, thriving, well-being

1 | INTRODUCTION

An increasing proportion of older adults in many parts of the western world continue to live in their homes and receive home care service

(HCS), despite declining health (Grabowski, 2006; Kaye, LaPlante, & Harrington, 2009; Newcomer et al., 2016). Little is known about well-being in relation to place of living in this group. Thriving is a recently developed concept emphasizing well-being in relation to

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the place one lives (Bergland & Kirkevold, 2001, 2006) and a newly developed questionnaire (Bergland, Kirkevold, Sandman, Hofoss, & Edvardsson, 2015) makes it possible to explore levels of thriving. This study contributes to knowledge about thriving and associated factors for persons with declining health and function when living at home and receiving HCS.

1.1 | Background

Ageing at home has been supported by policymakers in most of the western world. The goal is to maintain independent living and personal well-being while reducing costs for society (Genet et al., 2011; Grabowski, 2006; Kaye et al., 2009; Newcomer et al., 2016). Statistics from the Swedish National Board of Health and Welfare show a change in housing trends for adults in need of care in recent years. The number of adults 80 years and older living in nursing homes in Sweden decreased between 2001 and 2015 from 20% to 13% (Swedish National Board of Health & Welfare, 2016).

Even if many adults choose to age in place (Sixsmith & Sixsmith, 2008; Stones & Gullifer, 2016), the home environment may not always support healthy ageing when health and function is deteriorating. As early as 1983, Lawton (1983) suggested that environment is one important aspect in relation to well-being and function in older age. Furthermore, in a report from the World Health Organization, Beard et al. (2016) claims that the environment is an important factor contributing to opportunities for independent living and good ageing. Individuals are assumed to possess intrinsic capacity based on physical and psychological abilities which contributes to health; however, these abilities change during the ageing process. The interplay that exists between the environment and the individual's intrinsic capacity may support or inhibit development of a sense of security and comfort, as well as opportunities to take part in activities.

Assessing quality of life among older adults living at home has been criticized for being too focused on health-related factors and for not taking into account the complex factors that are important when living at home with declining health (Vanleerberghe, De Witte, Claes, Schalock, & Verté, 2017). For example, in a systematic review (Makai, Brouwer, Koopmanschap, Stolk, & Nieboer, 2014) found few quality of life and well-being instruments that included dimensions concerning environment. In another systematic review published 2017 (Leegaard et al., 2017), only one study (Yamada, Merz, & Kisvetrova, 2015) exploring self-rated quality of life was found to include environmental dimensions among older adults receiving home care, which means that well-being in relation to place when living at home with HCS has been explored to a limited extent.

The concept of thriving is a frequently used everyday word in the Scandinavian languages to describe the lived experience of the extent to which a person enjoys being in a specific place or environment. Haight, Barba, Tesh, and Courts (2002) argue that the experience of thriving results from a well-adjusted

interaction between the person and the human and non-human environment. Bergland and Kirkevold (2006) have developed a multidimensional concept of thriving in long-term care facilities (Bergland & Kirkevold, 2001, 2006). This concept includes two core aspects; a) the residents' mental attitude towards living in a long-term care facility and b) the quality of care and caregivers. Additional aspects involve positive relationships with others, participation in meaningful activities, opportunities to get outside and around, relationships with family and qualities of the physical environment. Thriving is not possible unless the core aspects are present, with the first core aspect being the most essential (Bergland & Kirkevold, 2006; Bergland et al., 2015). Furthermore, an important aspect for the group of older adults with declining health is that thriving is possible to achieve despite physical deterioration (Bergland & Kirkevold, 2001, 2006). With its emphasis on place-related well-being, the concept of thriving also seems relevant when the home is changed into a place for receiving care due to health-related changes.

The Thriving of Older People Assessment Scale (TOPAS) (Bergland et al., 2015, 2014) has been developed from the thriving concept. Examples of items are; I experience my current housing to be the best possible place to live in, I find that staff show respect, I participate in meaningful activities. This scale has been used previously in a few studies exclusively to explore the experience of thriving in nursing homes (Björk et al., 2017; Patomella, Sandman, Bergland, & Edvardsson, 2016). The study by Björk et al. (2017) was a national cross-sectional study including 4 831 participants in 172 different nursing homes, while the study by Patomella et al. (2016) included all residents in one nursing home including 191 participants. These two studies (Björk et al., 2017; Patomella et al., 2016) were conducted in Sweden during the same time period (year 2013–2014). Thriving among nursing home residents was found to be associated with several factors: ADL dependency, cognitive function, spending time outdoors (Björk et al., 2017; Patomella et al., 2016), physical impairment, behavioural and psychological symptoms, quality of life, length of stay (Patomella et al., 2016), spending time with someone the resident likes, taking part in activities and activity programmes (Björk et al., 2017). About associations between thriving and age, results diverge between studies where Björk et al. (2017) found an association between higher level of thriving and higher age, while Patomella et al. (2016) did not. The difference in results might depend on sampling differences, however, the studies contribute important knowledge about factors associated with increased thriving and well-being among nursing home residents. Knowledge about thriving among adults living at home receiving support from HCSs is lacking. However, there is an important difference between nursing home residents and older people living with frailty at home. Usually the first group are frailer and more dependent, they have left their (previous) home and are challenged to settle down in a different place and experience well-being in relation to a new place. The latter group might experience changes in their home due to dependency and help from others, but they stay in the same place. When scrutinizing the aspects included in the TOPAS, for example, the quality of care and caregivers, positive relationships and participation in meaningful

activities, it seems reasonable to believe that those aspects also have bearing on thriving when living at home and receiving HCS. To complement earlier studies about QoL and well-being, assessments of thriving may add valuable knowledge about living at home with declining health and function while receiving support from HCS.

2 | THE STUDY

2.1 | Aim

The aim of this study was to explore the level of thriving and associated factors among older adults living at home with support from HCS.

The research questions were:

- To what extent do older adults experience thriving at home when receiving support from HCS?
- To what extent is thriving when living at home with support from HCS associated with health-related quality of life (HRQoL) with respect to physical, psychological and psychosocial factors?

2.2 | Design

The study had an exploratory, cross-sectional survey design and was conducted in northern Sweden in 2016. The present study is part of an intervention study aimed at evaluating the effect of a person-centred and health promoting intervention in the HCS context (Bölenius, Lämås, Sandman, & Edvardsson, 2017). Data used in this study are the baseline data collected prior to the intervention.

2.3 | Participants and context

HCS in the context of this study means formal care with staff providing support for personal care and household tasks when the person in need of care lives at home. We use the term HCSs which is a term used for indexing in the journal citation data base Medline. In Sweden, care for older adults is mostly funded by taxes. A needs assessment forms the basis for decisions made by the local authority on the level of HCS required (Szebehely & Trydegård, 2014). The decision specifies the tasks staff are to perform and the amount of time needed to perform these tasks.

Three hundred and fifty-six adults receiving publicly funded HCS were invited to participate in an intervention study (Bölenius et al., 2017). The older adults were recruited via staff in the HCS in a municipality in northern Sweden. The inclusion criteria were a) being 65 years or older, b) living at home with HCS and c) understanding Swedish. Exclusion criteria were adults suffering from conditions that impede communication and/or understanding and older adults deemed to be too frail to answer the questionnaires used in the study. The decisions were based on professional

judgement made by staff who knew the participant well and by family members, no screening tool was used. Seventy adults declined to participate, 38 of the adults were judged to have cognitive impairment and 112 gave no explanation. In total, 163 older adults accepted the invitation for participation and of these, 136 participants reported on thriving and were included in this study (Table 1).

2.4 | Data collection

The older adults received a hard copy survey from staff in HCS or by post in 2016. The participants answered the questions and returned the survey in a prepaid envelope which was returned by post.

2.4.1 | Assessments

The survey included 151 questions in total and of those, 100 were included in this study. Data on demographics and information about HCS received were collected. Furthermore, the study survey included scales on thriving (TOPAS), HRQoL (NHP), participation and autonomy (IPA-O) and activity function (I-ADL).

Thriving

Thriving was measured using the TOPAS (Bergland et al., 2014). The original scale includes 32 items and consists of 5 subscales: the

TABLE 1 Demographics

Variables	Values
Women, N (%)	105 (77)
Age, Mean (SD)	82 (7.2)
Independent in I-ADL, total scale, N (%)	11 (9)
I-ADL item, N (%)	
Shopping	42 (32)
Cooking	79 (60)
Light house work	73 (55)
Heavy house work	13 (10)
Laundry	52 (40)
Financials	62 (48)
Using telephone	109 (83)
Years with HCS, Median, Q1; Q3	3 (1; 5)
Accommodation	
Apartment, N (%)	106 (80)
House, N (%)	26 (20)
Education	
Elementary school, N (%)	59 (45)
Secondary school, N (%)	49 (37)
University, N (%)	23 (18)

Note: n does not always add to 136 depending on missing variables.

residents' attitude towards the place they were currently living, quality of care and caregivers, activities and peer relationships, opportunities to keep in touch with people and places and qualities in the physical environment. Thriving is scored on a 6-point Likert scale, where a high value indicates high levels of thriving with a range from 32–192. The scale has been tested for construct validity and found to be valid. The reliability (Chronbach's alpha) of the entire scale was .95 and the five subscales showed an internal consistency of .83–.95 when assessing thriving among nursing homes residents (Bergland et al., 2015).

Health-related quality of life

HRQoL was measured using the Nottingham Health Profile (NHP) (Hunt, McKenna, McEwen, Williams, & Papp, 1981). The scale has 38 items in six dimensions; energy (3 items), pain (8 items), emotional reactions (9 items), sleep disturbance (5 items), social isolation (5 items) and physical mobility (8 items). Each item consists of a statement that can be answered as Yes or No. The total score of each dimension is calculated to an index and expressed as a percentage ranging from 0–100 (Hunt, McKenna, McEwen, et al., 1981). A high value represents greater perceived distress. Hunt, McKenna, McEwen, et al. (1981) stated that NHP was both valid and sensitive. Subjective ratings of health (very good, good, fair and poor) were found to have a clear linear relationship with ratings using NHP (Hunt, McKenna, McEwen, et al., 1981). Reliability have been found to be good (Spearman's $r = .77$ – $.85$) (Hunt, McKenna, & Williams, 1981).

Participation and autonomy

Participation and autonomy were measured using the Impact on Participation and Autonomy—Older Person's scale (IPA-O) (Hammar, Ekelund, Wilhelmson, & Eklund, 2014). The original scale includes 22 items and consists of six dimensions, however, due to relevance for the aim in this study, four dimensions were used: self-determination in mobility (score range 4–20), in self-care (score range 5–25), in activities in and around the house (score range 4–20) and having social relationships (score range 4–20). The subscales financial situation, use of time and help and support others, were excluded. Participation and autonomy were scored on a 5-point Likert Scale, where a high value represents high levels of participation and autonomy. Face validity was tested among frail, dependent and cognitive intact people living at home receiving home care service. The questions were assessed to be relevant and important. In test-retest analysis, reliability was found to be moderate to high ($PA = 61\%$ – 97%) in three of the four subscales used. The fourth subscale, self-determination in mobility, includes four items where one item has been found to have low reliability ($PA = 54\%$) (opportunities to make decisions about trips and holidays) (Hammar et al., 2014). However, Hammar et al. (2014) recommended including this item because of its importance.

Instrumental activity in daily living

Instrumental Activity in Daily Living (I-ADL) was measured using a modified version of Lawton and Brody's scale (Lawton & Brody, 1969). The modified scale consists of seven dimensions; shopping,

food preparation, heavy housekeeping, light housekeeping, laundry, ability to handle finances and ability to use the telephone. The dimensions were scored on 3, 4 and 5-point Likert Scales, with a high value representing independence. The dimensions were dichotomized, scoring levels indicating need of help in any extent were scored as 0 and totally independent were scored as 1. Total score then ranged from 0–7. Lawton and Brody's IADL scale has been used extensively in research (Roedl, Wilson, & Fine, 2016). Lawton and Brody (1969) showed significant concurrent validity of the IADL in relation to several other functional measures (intercorrelations between $.40$ – $.61$) and satisfactory interrater reliability (mean correlation $.85$).

2.5 | Ethical consideration

The study has been approved by the Regional Ethics Review Board (Dnr 2016/04-31Ö). Together with the survey, an information letter was included giving detailed information about the study. The letter informed participants that participation was voluntary. The participants provided signed informed consent to participate in the study when they returned the survey by post.

2.6 | Data analysis

Descriptive statistics were used to analyse participant characteristics, thriving total scores and subscale scores. Categorical variables are presented in number and per cent and continuous variables are presented by mean (*SD*) or, in case of skewed distribution, median and quartile. In addition, descriptive statistics for the TOPAS scores are presented in mean (*SD*) to enable comparison with results from earlier studies. Depending on that the distribution was skewed, the data were dichotomized, and logistic regression analysis was used. The sample was divided into two groups based on the total group median score for thriving, that is, one group with lower scores (below the group median value) and one group with higher scores (above the group median thriving value) respectively. Because there is no existing cut-off for high and low level in thriving, median was used as a cut-off value. In total, 19 variables were used as independent variables, the variables were sorted into domains; a) Health—physical mobility, energy, pain, sleep disturbance and emotional reaction (NHP) and function according to I-ADL, b) Psychosocial factors—social isolation (NHP), cohabitants, social relationships (IPA-O), c) Care-related factors—years with HCS, number of visits per week, number of different type of service, self-determination in mobility (IPA-O) in self-care (IPA-O) and in activities (IPA-O). When printing the study surveys, two items in one of the TOPAS subscales were accidentally omitted. These two missing items were replaced in the data file by imputing the mean total TOPAS score so as not to manipulate or distort the overall distribution while still enabling comparative analyses. These imputed TOPAS scores were only used in the descriptive analysis of total score of thriving in the total sample.

To compare lower and higher thriving according to ordinal and interval variables the Mann–Whitney test was used. To compare lower and higher levels of thriving according to nominal variables, chi-square and Fischer's Exact Test were used.

To further explore variables' associations with thriving (dependent variable), the variables found to be statistically significant at $p \leq .2$ in the univariate analysis were used as independent variables and entered into a regression model (number or different type of service; NHP subscales: physical mobility, emotional reactions, social isolation, energy and pain; and IPA-O subscales: Self-determination in mobility, self-care, activity and participating in social relationships). We used a multiple logistic regression analysis with a step-wise backward elimination procedure until only significant variables were left. Age and gender were included in the model for theoretical reasons. A p -value of $<.05$ was considered statistically significant in all analyses. The variance inflation factor (VIF) was used for checking multicollinearity. Statistical calculations were performed using IBM® SPSS® Statistics version 23.0

2.7 | Validity and reliability

For use in this study, some questions in the TOPAS were reformulated to fit the context of living at home receiving HCS, for example, 'other residents' was changed to 'neighbours', 'all residents' to 'me' and 'nursing home' to 'my home'. This new version for use in the home care context has not been used or validated previously. The internal consistency estimated by Cronbach's alpha was .94 for the total TOPAS scale and varied in the subscales between .85 – .93. However, since two questions in the TOPAS questionnaire were accidentally omitted, the Cronbach's alpha is based on the questions included in our survey, see further information in the limitations section. For the subscales in the NHP, Cronbach's alpha varied between .53 and .79 and in IPA-O, Cronbach's alpha values varied between .74 and .86 in the subscales. No total score of NHP or IPA-O have been used. In cases of $<10\%$ missing data in scales, the missing data were imputed using the total mean

score for each individual (cf. Shrive, Stuart, Quan, & Ghali, 2006). Depending on missing data, the regression analysis is based on data from 111 participants out of 136.

3 | RESULTS

Of the participants, 77% ($N = 105$) were women and the mean age was 82 years (range 65–100, $SD 7.8$). In I-ADL, the median score was 2 on a 6-point scale where 6 represents independence. The median length of time the participants had received HCS for was 3 years and they had one visit per day. Most of the participants lived in apartments (80%, $N = 106$) (Table 1).

The total score for thriving among adults living at home receiving HCS was 159 ($SD 23.9$). The subscales measuring individuals' opportunities for engagement in 'activities and peer relations' showed the lowest scores, followed by results from the subscale about 'opportunities to keep in touch with people and places' (Table 2).

When comparing adults with lower scores (below 148, mean 139) with those who had scored respectively high (above 148, mean 178) on TOPAS, the group with high level of thriving (HT) had a better physical state (NHP-physical mobility, $p < .001$) and psychological state (NHP-emotional reaction $p = .001$). The HT group also rated some psychosocial factors more positively (NHP-social isolation, $p = .014$, IPA-O—participate in social interactions, $p < .001$). Concerning care-related factors, the HT group rated higher self-determination due to mobility ($p < .001$), self-care ($p = .001$) and activities in and around the house ($p < .001$). They also received help with fewer tasks (number of different types of service, $p = .014$). Age and gender did not differ between groups with low or high levels of thriving. Nor did function in relation to I-ADL, amount of service from HCS, or of participants who lived alone (Table 3).

In the final logistic regression model, only two variables remained significant except for age and gender. The two variables were 'Social relationships' with an odds ratio of 1.71 and 'Self-determination in activities in and around the house', odds ratio 1.15. The odds ratio indicates that more social relationships and more self-determination

TABLE 2 Level of thriving assessed using TOPAS, total scale and subscales

Scales	Number of items	Mean score/ item (SD)	Total mean score (SD)	Min–Max
TOPAS total score	32	5.0 (0.8)	159 (23.9)	63–192
Home care receiver's attitude	4	5.5 (1.0)	22 (3.8)	4–24
Quality of care and caregivers	9	5.4 (0.7)	49 (6.0)	9–54
Activities and peer relations	8	3.9 (1.4)	31 (11.2)	8–48
Keeping in touch with people and places	4	4.6 (1.2)	18 (4.9)	4–24
Qualities in the physical environment	5	5.8 (0.7)	28 (3.2)	8–30

Note: TOPAS 6-point Likert Scale where 6 indicates a maximum value in thriving.

Variables	Lower thriving N = 68	Higher thriving N = 68	p-value
Age ^a	81 (8)	83 (8)	.187
Gender n(%) ^b			
Women	44 (65)	39 (57)	.482
Men	24 (35)	29 (43)	
Health			
Physical mobility (NHP) ^{c,d}	56 (38; 75)	38 (16; 62)	<.001
Emotional reactions (NHP) ^{c,d}	22 (11; 42)	0 (0; 22)	.001
Pain (NHP) ^{c,d}	50 (12; 62)	12 (0; 62)	.020
Energy (NHP) ^{c,d}	67 (33; 100)	33 (0; 67)	.002
Sleep disturbances (NHP) ^{c,d}	20(20; 60)	20 (20; 55)	.617
I-ADL ^c	4 (3; 5)	3 (2; 4)	.423
Psychosocial factors			
Living alone n(%) ^b	54 (82)	52 (79)	.827
Social isolation (NHP) ^{c,d}	20 (0; 40)	0 (0; 20)	.014
Participate in social relationships (IPA-O) ^c	21 (18; 23)	25 (22; 25)	<.001
Care related factors			
Years with home care service ^c	3 (1;5)	3 (1; 5)	.874
Number of different type of services ^c	3 (2;4)	2 (1; 3)	.014
Self-determination in mobility (IPA-O) ^c	18 (16; 20)	20 (19; 20)	<.001
Self-determination in self-care (IPA-O) ^c	25 (22; 25)	25 (25; 25)	.001
Self-determination in activity (IPA-O) ^c	15 (12; 18)	20 (16; 20)	<.001

^aMean (SD) T-test.

^b χ^2 .

^cMedian (Q1: Q3) Mann-Whitney Test.

^dThe lower value the better QoL.

in activities gives higher odds of high level of thriving. The model explained 44% of the variation (Table 4).

4 | DISCUSSION

The results showed that the older adults rated their overall thriving relatively high (159 of 192 points) which is in line with results from studies among nursing home residents (Björk et al., 2017; Patomella et al., 2016). According to the level of thriving, two subscales; 'activities and peer relations' and 'keeping in touch with people and places', were

TABLE 4 Logistic regression analysis of factors associated with thriving (n = 111)

	OR	95% CI	p-value
Age	0.96	0.90–1.02	.204
Gender	0.46	0.82–5.87	.119
Social relations	1.71	1.34–2.19	<.001
Self-determination in activities	1.15	1.03–1.29	.015

Note: Model $\chi^2 = 44.8$, $df = 4$, $p < .001$, Nagelkerke $R^2 = .443$.

TABLE 3 Comparison of adults experiencing lower and higher levels of thriving (n varies from 49 to 68 in each group depending on missing values)

rated lower than the other dimensions. The regression analysis showed that participating in social relationships had the highest odds ratio, followed by self-determination in activities in and around the house.

At subscale level, the results differed in some parts from ratings among nursing home residents as found by Patomella et al. (2016). 'Activities and peer relations' was rated somewhat lower among adults living at home with HCS compared with individuals living in nursing homes (Patomella et al., 2016). These lower ratings may be interpreted as psychosocial needs being satisfied to a lesser extent when living at home and receiving HCS. Persons who are living at home receiving HCS may therefore require further consideration in relation to inclusion in psychosocial activities when allocating and planning care compared with those living in nursing homes where activity programmes and spaces for meeting other residents are more readily available. The subscale 'Keeping in touch with people and places' was rated low in our study and rated at a comparable level among adults living in nursing homes (Patomella et al., 2016). The residents living with more frailty than older people living at home (Collard, Boter, Schoevers, & Oude Voshaar, 2012; Kojima, 2015) and this may have been expected to influence the ratings in these subscales. Even though positive benefits were reported, Sixsmith and Sixsmith (2008) found in their

qualitative study among adults 80–85 years old in UK, that living at home resulted in feelings of isolation and loneliness due to unsuitable environments both inside and outside the home. Thus, the environmental factors at home and in the neighbourhood could form one barrier for opportunities to keep in touch with people and places. The subscale 'Qualities in the physical environment' was rated high in this study and differs most from the nursing home study by Patomella et al. (2016). Our findings can, through their high appreciation of the physical home environment compared with previous nursing home estimates, be seen to support the findings by Stone and Gullifer (2016) where adults living at home described their perceptions of the nursing home environment as being more depersonalized and threatening to autonomy.

The similarities between the findings in our study and previous findings among nursing home residents on total thriving scores are somewhat surprising. The purported positive attributes of living at home; experience of privacy, security, comfort and personal freedom (Annisson, 2000; Sixsmith & Sixsmith, 2008), compared with a supposed need to adapt to routines and limited opportunity to take part in society when moving to nursing home (Stones & Gullifer, 2016), could be assumed to have an effect on thriving. However, when comparing ratings in subscales between older adults living at home with support from HCS versus older adults living in nursing homes there are some differences. Our findings point to the quality of the physical environment in terms of aesthetics, enjoyment and safety of the home as being rated higher compared with being in a nursing home. On the other hand, the opportunity to take part in activities and peer relations might be somewhat less available when living at home compared with when living in a nursing home. The results from subscale ratings appear to be more valuable when making comparisons between different studies as these give descriptive information at dimension level which is seemingly easier to interpret.

When comparing the groups with higher and lower levels of thriving according to health and psychosocial factors, the group with higher levels of thriving were found to have better health in many respects and rated social relationships higher than those in the group with lower levels of thriving (Table 3). The finding of better health is in line with Patomella et al. (2016) where the group with high thriving levels showed higher ADL function and quality of life and less psychiatric and behavioural symptoms. However, in the following logistic regression, none of the health factors remained significant and only the psychosocial factor with rated social relationships remained significant in the final model together with the opportunity to have self-determination in activities.

Thus, psychosocial factors seem to be important in relation to thriving and in the final model of the logistic regression the opportunity to participate in social relationships had the highest odds ratio. This is in line with findings in Björk et al. (2017), where many variables associated with thriving included a dimension concerning relationships with others. Social relationships have previously been shown to be immensely important for older adults. For example, a meta-analysis of 148 longitudinal studies of social relationships found that adequate social relations increased the odds for survival by 50% (Holt-Lunstad,

Smith, & Layton, 2010). In summary, social relationships have been confirmed to play an important part in health and wellness and may therefore deserve an increased focus in HCS, perhaps to the extent of being regarded as an important care task in its own right.

In the final regression model, 'Self-determination in activities in and around the house' had significant positive association with thriving. This finding is in line with earlier findings, for example, Levasseur, Tribble, and Desrosiers (2009), reporting that older community-dwelling adults described that opportunities to make choices was important and lack of control over life affected their quality of life negatively. Also, healthcare staff consider self-determination to be an important part of health in older age (Flick, Fischer, Neuber, Schwartz, & Walter, 2003). Being dependent in daily life activities and receiving HCS is considered to pose a risk for reduced self-determination and individual influence over daily life may subsequently decrease (Breitholtz, Snellman, & Fagerberg, 2013; Fjordside & Morville, 2016). To promote health, staff should give opportunities for the older adults to practice self-determination based on their abilities (Welford, Murphy, Wallace, & Casey, 2010) which may contribute to a feeling of independence (Breitholtz et al., 2013).

4.1 | Limitations

The study response rate can be considered as moderate (about 40%) and a shortness of information about the non-responders makes further response analyses difficult. Missing data in 25 cases further reduced the total number of cases included in the regression model. The survey was pilot tested among four older adults with the purpose to avoid the survey being too strenuous to answer. Nonetheless, the remaining number of survey items may have resulted in adults with health problems and reduced strength refrained from answering parts of or the whole survey. The extensiveness of the survey could also have implied a risk that completing involved relatives or significant others, even if this remains unknown. Consequently, there is a risk that the sample and the data may not be entirely representative of older adults living at home with support from HCS. However, because of the importance to increase the knowledge in the group of older home dwelling people living with frailty, our study can contribute with beginning knowledge as a base for evidence generation in this specific area.

As two questions in the TOPAS questionnaire were accidentally omitted in the printing process, these missing answers were imputed by the mean total TOPAS score. The effect of such an imputation was tested in a complete external data set ($N = 163$) and was found to have only a minor influence on the overall total score (Cohen's d at .008). Consequently, the imputation risks and consequences on data were deemed minor and clinically insignificant. The imputed values were not used in the presentation of the subscale or in the logistic regression. Both items missed were in one of the subscales 'quality of care', which originally constituted of 11 items. One item was; 'I regard staff as being nice' and the other; 'I find that staff take an

interest in me'. There were several other items in the same domain that were phrased using different wording, such as about staff as kind and showing respect, finding staff to do their best and being competent. Conceptually, it is reasonable to believe that the missing items will have a small but limited effect. In our analysis, the mean value per item in the subscale with and without the missing items showed 5.26 versus 5.25 $p = .321$ which also points to the effect on the concept as being limited.

Furthermore, the TOPAS has previously been used in a nursing home context and has not been used among adults living at home. Since two questions were missing, a psychometric test of the scale could not be performed in this study and thus the scale would benefit from further analyses of validity and reliability in samples of older adults living at home.

Due to the cross-sectional design, no conclusion about causality can be drawn. However, this is the first time thriving has been estimated in the home care context and contributes essential knowledge for further research.

5 | CONCLUSION

As far as we know, this is the first study to evaluate thriving among older adults living at home with HCS. The results showed a significant association between thriving and self-determination and social relationships and may indicate that self-determination and social relationships are important for older adults' experiences of thriving when living at home with HCS. An essential task for HCS to promote thriving can be to increasingly emphasizing facilitating social relations when the individual's own ability is insufficient. Social relations can be supported by, for example, assist the old person in maintaining contact with family and friends as well as offering access to social activities. Furthermore, to increase self-determination may be important for thriving. Self-determination can be enhanced by inviting the home care receiver as an active partner in decisions about planning and performance of care. It is probably, though, that increased focus on social relations and self-determination demands a supporting organization that make change possible. It is also probably that HCS staff could benefit from further education. However, further studies about the causalities are needed to support our findings.

CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to report.

AUTHOR CONTRIBUTIONS

KL, KB, DE, POS and ML made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data. KL, KB, DE, POS, ÅB and ML were involved in drafting the manuscript or revising it critically for important intellectual content and given final approval of the version to be published. KL, KB, DE and POS agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

ORCID

Kristina Lämås  <https://orcid.org/0000-0002-5877-3458>

David Edvardsson  <https://orcid.org/0000-0001-8787-2327>

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