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Longitudinal changes in nursing home leadership, direct care staff job strain and social support in Swedish nursing homes—findings from the U-AGE SWENIS study

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Abstract

Background: Promoting healthy work environment as a manager in nursing homes is important to safeguard staff health and well-being as well as care quality when facing increasing demands. The impact of leadership on staff work environment needs further exploration.

Objectives: To describe longitudinal changes in nursing home leadership, direct care staff characteristics, job strain and social support.

Methods: This study has a repeated cross-sectional design, a five-year follow-up study. Nursing home staff in 181 corresponding units ($n = 1253$ in 2014 and $n = 1176$ in 2019) completed surveys about leadership, staff job strain and social support in a five-year follow-up study. Descriptive and regression analyses were conducted.

Results: A higher degree of leadership defined by coaching and providing direct feedback to care staff, handling conflicts in a constructive way and having control of the clinical work, was significantly associated with a lower degree of job strain and a higher degree of social support among staff, with stronger associations at follow-up. The proportion of enrolled nurses increased significantly at follow-up.

Conclusions: Leadership is increasingly important for staff work environment, especially in times of increased workload and decreasing collegiality and deteriorating work atmosphere at work.

Implications for Practice: Stakeholder and policy makers in nursing home care may reflect on how managers' leadership is prioritised in these environments because such leadership is associated with staff job strain and social support. Managers striving to improve the work situation of staff may consider their own role and allow flexibility in how and when the work can be performed.

KEYWORDS
job strain, leadership, management, social support, stress

1 | INTRODUCTION

In Sweden as well as internationally, the emerging workforce shortages puts additional pressures on already strained aged care organisations that struggle with work-related stress, high sickness leave and high turnover rates among staff (OECD, 2020). Staffing shortages in nursing homes have been associated with reduced care quality (Antwi & Bowblis, 2018; Castle, 2008; Lerner et al., 2014) as has work-related stress among nursing home staff (Zúñiga et al., 2015). This implies that attracting and retaining aged care workers ought to be a top priority in order to maintain high care quality in the face of increasing demands. Promoting healthy work situations as a nursing home manager seems essential for safeguarding staff health and care quality. This paper presents longitudinal measures of nursing home managers' leadership and its association with staff job strain and social support in a matched sample of nursing home units.

In Swedish nursing homes, the direct care workforce consists mainly of nurse assistants and enrolled nurses being responsible for personal health and social care provision (NBHW, 2015). Medical and nursing care provision are provided and/or directed and delegated by registered nurses (SOU, 2014:19). This staffing pattern concerning roles and responsibilities is consistent with most Scandinavian and OECD countries although actual staffing ratios and educational levels vary slightly within and across countries (OECD, 2020). Working in nursing home care has been described as both challenging and demanding, thus putting staff at risk of experiencing job strain (Edberg et al., 2008; Edvardsson et al., 2009; Elovaino et al., 2014; Hasson & Arnetz, 2008) and at increased risk of ill-health (Elovaino et al., 2014; Pekkarinen et al., 2013).

One commonly used model for exploring the psychosocial work environment in terms of job strain is the demand-control model by Karasek and Theorell (Karasek, 1979; Karasek & Theorell, 1990). The third dimension, social support, refers to supportive social interactions from colleagues' and superiors, which supposed to reduce the effect of job strain (Johnson, 1986; Johnson & Hall, 1988). The model proposes that staff health is threatened when staff experiences high demands and low control and social support (Karasek & Theorell, 1990). There is a vast amount of evidence in occupational health research linking job strain to an increased risk of various health issues such as headaches, insomnia, poor concentration, irritability and nervousness (Schmidt & Diestel, 2011, 2012) as well as burnout (Maslach et al., 1996). Higher degree of job strain has also been related to a lower degree of person-centred care (Sjögren et al., 2014; Sköldunger et al., 2020). The significance of leadership on staff perception of the psychosocial work environment has also been documented in previous research. Two earlier literature reviews have reported that workload, shift work, work environment, professional conflicts, leadership styles, poor leadership and poor management are all important aspects of work-related stress (Clegg, 2001; McVicar, 2003). However, the included studies were all conducted in the 90s and earlier, and their impacts varied considerably between studies thus preventing robust conclusions. In nursing homes, only a few studies have been conducted recently. A qualitative study showed that staff strain was related to manager/leader support (Edberg et al., 2008). Two other studies reported that supportive leadership was related to lower perceptions of job strain (Backman et al., 2018; Orrung Wallin et al., 2015) and similar findings were reported in a study showing that organisational and leadership support and control at work were associated with lower staff stress (Testad et al., 2010). Supportive leadership was related to less work-related stress and higher job satisfaction among nursing home staff (McGilton et al., 2007). This suggests that leadership exerted by the nursing home managers may play a key role in providing healthy work environment, where there is a balance between demands and control. However, a systematic review synthesising the prevalence and associations of staff stress in long-term care has concluded that there is a lack of longitudinal studies in this area (Costello et al., 2019). For leadership and its impact on staff work-related stress, no longitudinal studies have been found. In light of the above, it seems essential to explore longitudinal changes in how leadership might impact the staff work situation. The aim of this study was to describe longitudinal changes in nursing home

What does this research add to existing knowledge in gerontology?

- This study replicates and confirms the significant beneficial relationships between leadership and staff job strain and social support.
- Leadership is increasingly important for staff work situations, especially in times of perceived increased workloads, decreasing collegiality and less pleasant atmosphere at work.

What are the implications of this new knowledge for nursing care with older people?

- Nursing home managers have a significant role in offering support and providing strategies that promote healthy work situations in order to prevent ill-health and loss of valuable direct care staff.
- Managers striving to improve the work situation of staff can consider their own role, offer support and allow flexibility in how and when the work can be performed.

How could the findings be used to influence policy or practice or research or education?

- Stakeholders and policy makers may reflect on how managerial leadership is prioritised, as leadership has the potential to improve the perceived work situation for direct care staff in nursing homes.
- This study provides important directions for policy decisions, organisational operations and leadership strategies, on how to safeguard staff health and care quality in future nursing home practices.

leadership, direct care staff characteristics, job strain and social support in a matched sample of nursing home units.

2 | METHODS

2.1 | Study design

The SWENIS study, within the Umeå ageing and health research programme, is an explorative project with a longitudinal design with repeated a point prevalence measurement every 5 years (Edvardsson et al., 2016). This is a follow-up study; baseline data and results have been published elsewhere (Backman et al., 2018).

2.2 | Sampling and data collection

SWENIS I (T1) was performed in 2013–2014. Of the 290 Swedish municipalities in total, 60 were randomly selected, and 35 municipalities agreed to participate in T1. The first follow-up, SWENIS II (T2), was conducted in 2018–2019. Twenty-five municipalities from baseline T1 agreed to participate in the first follow-up (T2). IN order to have the same number, that is 60 invited municipalities from the start, another 35 municipalities were randomised for inclusion to replace the drop-outs. The collection procedure was similar at both baseline (T1) and follow-up (T2). For this study, two surveys were used. A self-reported staff survey comprising demographic variables along with estimations of leadership and the work situation of staff. An organisational survey for the managers including variables about managerial and organisational characteristics was also used. The organisational survey was performed as a structured telephone interview with the nursing home managers. All participants were provided with written information about the study, as this was written on the front page on the survey. The front page of the survey also contained contact information on how the survey would be completed and whom to contact whether questions or concerns arose (i.e. the researchers/authors of this paper). It was also stated that all participation was voluntary and withdrawal was possible at any time. For T1, data collection was performed between November 2013 and September 2014, and for T2 between November 2018 and April 2019. Flowcharts of both data collections on which this study is based on has been published elsewhere (Baxter, 2021). The final SWENIS samples comprises manager and staff data from 169 nursing homes at T1 (staff $n = 3605$, response rate = 68%) and data from 190 nursing homes (staff $n = 2985$, response rate = 52%) at T2. The staff data comprise primarily data from enrolled nurses and nurse assistants, and they are responsible for providing personal care and social services to residents in this context (NBHW, 2015; Törnquist, 2004). Enrolled nurses in this study context have upper secondary level schooling with up to 3 years of training and nurses' assistant have approximately 1 year of training/education (Eurodiaconia, 2016). Also, registered nurses were part of staff data, and they had a bachelor degree in nursing and responsible for medical care and nursing care provision (SOU, 2014:19). This study is based on a sub-sample of matched units, that is those units that participated in both baseline (T1) and follow-up (T2), ($n = 181$). In these units, data for analyses derived from $n = 1253$ participants from T1 (35%) and $n = 1176$ participants from T2 (39%).

2.3 | Measurements

2.3.1 | Leadership behaviour questionnaire©

Nursing home managers' leadership was measured by the Leadership Behaviour Questionnaire© (Ekvall & Arvonen, 1994). The instrument consists of 24 statements about a range of leadership behaviours. Leadership was rated by staff on a 6-point scale ranging from 1 (completely disagree) to 6 (completely agree). The summarised scores gives a possible range of 24–144 (Backman et al., 2016; Orrung Wallin et al., 2015). Analyses have revealed that characteristics of highly rated leadership are managers who *Experiment with new ideas*, *Control work closely*, *Rely on their subordinates*, *Coach and give direct feedback*, and *Handle conflicts in a constructive way* (Backman et al., 2017, 2022). Thus, these can be considered to be the most important characteristics of the leadership measured. More information about psychometric properties of 24-item questionnaire can be found in Backman et al., 2017, 2022. Internal consistency (Cronbach's α) was .98 at both data collections.

2.3.2 | The Swedish Demand-Control-Support questionnaire (DCSQ)

The Swedish DCSQ (Karasek & Theorell, 1990, p. 337) measures staffs´ experiences of job strain and social support. The instrument consists of 17 items divided in three subscales psychological demands (five items), decision latitude/control (six items) and social support (six items). The scale is rated on a four-point scale from 1 to 4 (1 = no never, to 4 = yes often). For this paper, the sum of psychological demands was divided by the sum decision latitude/control subscales to calculate a continuous variable of job strain (cf. Morgan et al., 2002), which gives a possible job strain index from 0.21 to 3.33. Higher value indicates more job strain (Morgan et al., 2002). A total score can be calculated for social support subscale giving a possible range of 6–24, where higher scores indicate higher level of social support. Cronbach's α was .78 for the psychological demands subscale at T1 and .77 at T2. α was .50 for the decision subscale at T1 and .49 at T2. For social support subscale, α was .82 at T1 and .83 at T2.

2.4 | Ethics

Ethical approval for this study was sought and obtained from the Regional Ethical Review Board in Umeå (Dnr 2013–269-31, 20–2018).

2.5 | Analyses

The SPSS version 26 was used for analysing the data. To increase the statistical power in the analyses, an individual mean imputation method was applied to replace missing information, in the analyses that were made on total scores (cf. Shrive et al., 2006). In analyses made on total scores, missing items were replaced with the mean value of the individual for the total scale. For Leadership Behaviour Questionnaire, up to three missing items were imputed (i.e. a maximum of 12.5% of the items of the scale). This means that 364 individuals (10.1% of all) in T1 and 418 individuals (10.4%) in T2 got 1–3 item imputed, and could therefore be included in the analyses. For the psychological demand subscale, a maximum of one missing item was imputed (20%); thus, 122 individuals (3.4%) in T1 and 131 individuals (4.4%) in T2 got one item imputed. For the decision subscale, a maximum of one missing item was imputed (16.7%); thus, 79 individuals (2.2%) at T1 and 90 individuals (3.0%) in T2 got one item imputed. For the social support subscale, a maximum of one missing item was imputed (16.7%); thus, 68 individuals (1.9%) in T1 and 57 individuals (1.9%) in T2 got one item imputed. Analyses are made by comparing data from units at T1, with data from the exact same units 5 years later, at T2, by matching units by their unique code number. The matching is done by using generalised estimating equations (GEE) which specifies a correlations structure for individuals in the same unit. Statistical significance was accepted if $p < .05$.

The analyses were conducted in several steps. First, descriptive and comparative statistics were used to investigate characteristics´ of the participants and to compare mean values between study variables at T1 and T2. Secondly, the relationships between leadership as the main explanatory variable and the outcome variables of job strain and social support were investigated over time using Pearson's product–moment correlation coefficient and multiple linear regression with a cross term estimating the change in relation over time. The linear regression analyses were visualised by scatterplots. As a final step (sensitivity analysis), the changes in relations over time were estimated with generalised estimating equations (GEEs) with adjustments such as correlations between individuals in units, that is, staff rated their work situation within the unit and assuming an exchangeable correlation structure. The GEE analyses were further adjusted for the possible confounding variables of sex and education.

3 | RESULTS

3.1 | Longitudinal comparisons of staff demographics

When comparing staff demographics in corresponding units between T1 and T2, significant differences were only seen in terms of staffing qualifications. In matched units, the proportion of enrolled nurses significantly increased from 83.2% at T1 to 87.6% at T2, and the proportion of nurse's assistants decreased from 12.2% at T1 to 8.1% at T1 ($p = .014$) (Table 1).

TABLE 1 Longitudinal comparisons of staff demographics between T1 and T2 in corresponding units

	SWENIS I		SWENIS II		
Staff	*n*[a] (%)	*m* (SD)	*n*[b] (%)	*m* (SD)	*p*-Value
Age (Years)		46.0 (11.7)		45.2 (12.6)	.12
Gender					
Men	61 (4.9)		78 (6.7)		.07
Women	1178 (95.1)		1169 (93.3)		
Qualifications					
Registered nurses	5 (0.4)		4 (0.3)		.014
Enrolled nurses	1027 (83.2)		1021 (87.6)		
Nurse's assistants	150 (12.2)		95 (8.1)		
No formal qualifications	25 (2)		28 (2.4)		
Other education	27 (2.2)		18 (1.5)		
Work shift					
Day shift	31 (2.5)		26 (2.2)		.93
Day and evening	1087 (87.9)		1034 (88.6)		
Day, evening, night shift	109 (8.8)		99 (8.5)		
Years of experience in aged care		17.7 (10.3)		17.4 (11.9)	.58
Years of experience in this facility		9.6 (8.0)		9.8 (8.7)	.56

[a]Does not always add up to 1253 in all variables due to missing items.
[b]Does not always add up to 1176 in all variables due to missing items.

TABLE 2 Comparisons of total score mean values of leadership, job strain and social support in corresponding units at T1 and T2

Data collection	*N*	*m* (SD)	Sig. (2-tailed)
Leadership			
1	1223	110.1 (23.5)	0.084
2	1144	111.8 (23.1)	
Job strain			
1	1228	0.70 (0.17)	0.510
2	1154	0.70 (0.16)	
Social support			
1	1240	21.4 (2.6)	0.067
2	1164	21.3 (2.7)	

3.2 | Longitudinal comparisons of mean values in leadership, job strain and social support

No significant changes in total scores for leadership, job strain or social support were seen when comparing total scores at T1 and T2 (Table 2). However, when exploring the study variables on the item level, significant changes were seen in four items regarding job strain and social support when comparing T1 and T2 (Table 3). The item *Does your job require too much work effort?* significantly increased from 2.80 at T1 to 2.97 at T2 ($p < .001$). The item *Do you have the opportunity to learn new things in your work?* also significantly increased from 3.03 at T1 to 3.13 at T2 ($p < .001$). The item *There is a quiet and pleasant atmosphere at my place of work* significantly decreased from 3.26 at T1 to 3.20 at T2 ($p = .038$), and the item *There is good collegiality at work* also significantly decreased from 3.56 at T1 to 3.50 at T2 ($p = .024$). Longitudinal changes in leadership items have been reported elsewhere (Backman et al., 2022).

3.3 | Longitudinal changes in the associations between leadership, job strain and social support

A significant negative correlation was found between leadership and job strain at both T1 ($r = -.291$, $p < .001$) and T2 ($r = -.400$, $p < .001$). There were also significant positive relations between leadership and social support at T1 ($r = .353$, $p < .001$) and T2 ($r = .421$, $p < .001$) (Table 4).

The univariate linear regressions estimating the change in relation between leadership and job strain from T1 to T2 showed significant changes in the strength of the association ($\Delta\beta = -.001$, $p = .005$) with a stronger association at T2 (Figure 1). Also, univariate linear regression estimating the change in relation between leadership and social support from T1 to T2 also showed a significant change in the strength of the association ($\Delta\beta = .011$, $p = .010$), with a stronger association at T2 (Figure 2).

The GEEs estimated the change in relation between leadership and the outcome from T1 to T2, confirming the findings from the linear regression. Significant changes in the strength of association were found between leadership and job strain ($\Delta\beta = -.001$, $p = .021$) and also between leadership and social support comparing T1 and T2 ($\Delta\beta = .011$, $p = .010$). These associations were stronger at T2 (Table 4).

4 | DISCUSSION

The aim of this study was to describe longitudinal changes in nursing home leadership, direct care staff characteristics, job strain and social support in a national sample of matched nursing home units. The results showed that between 2014 and 2019 the workforce characteristics had changed in terms of a higher proportion of enrolled nurses and a smaller proportion of nurse's assistants at T2. When comparing job strain and social support variables over time, a significant increase was seen in terms of reporting that the job required too much work effort as well as perceived deteriorating collegiality and work atmosphere at T2. In contrast, staff also reported that they had greater opportunity to learn new things at T2. Further, significant changes in the strength of the association between leadership and job strain as well as between leadership and social support were found when comparing T1 and T2, with stronger associations at T2. This indicates that the significant associations that were evident at T1 still remained at T2, but with increasingly strengthened associations between leadership and staff job strain and social support over time. A recently published study based on the same data (Backman et al., 2022) has confirmed that the most important leadership characteristics (as measured in this current study) are to coach and give direct feedback, to handle conflicts in a constructive way, and to have control of the work as a manager. Seen in relation to this study's findings, it can be interpreted that it becomes even more important to coach and give direct feedback, have control over the work situation, and handle conflicts as a manager in order to prevent experiences of high job strain among staff. This seems especially important in times when staff perceive an increased workload and when perceptions of collegiality and work atmosphere seem to be deteriorating.

According to the demand-control theory, job strain may arise when there is too much work in relation to available time, as well when there are limited opportunities to determine how and when the work should be done (Karasek & Theorell, 1990). A tentative interpretation of the study findings is that when nursing home managers coach staff and help solve conflicts and give staff the opportunity to organise and structure the workday as they wish, perceptions of strain are alleviated. This tentative interpretation is supported by Narayanasamy and Penney (2014) who reported that leaders who coach and who help staff to vent on work issues and to solve or redirect problems and who also encourage staff to set their own goals and develop their own work plans can promote ownership and responsibility for the work situation among staff (Narayanasamy & Penney, 2014). This also echoes the theoretical assumption that allowing staff to deal with demands in ways they find reasonable and when they are able to increases the sense of control, which might mitigate work stressors (cf. Karasek & Theorell, 1990). The present study also showed that staff reported

TABLE 3 Mean differences in job strain and social support items between T1 and T2

Items psychological demands subscale	Data collection	N	m	SD	Sig. (2-tailed)
Does your job require you to work very fast?	T1	1238	3.13	0.68	0.086
	T2	1167	3.08	0.69	
Does your job require you to work very hard?	T1	1237	2.99	0.75	0.381
	T2	1159	3.01	0.74	
Does your job require a too much work effort?	T1	1226	2.80	0.76	<0.001
	T2	1154	2.97	0.71	
Do you have sufficient time for all your work tasks?[a]	T1	1236	1.98	0.77	0.448
	T2	1151	1.96	0.76	
Do conflicting demands often occur in your work?	T1	1215	2.67	0.72	0.850
	T2	1148	2.66	0.71	
Items decision latitude subscale					
Do you have the opportunity to learn new things in your work?	T1	1241	3.03	0.64	<0.001
	T2	1167	3.13	0.67	
Does your job require high skill level?	T1	1232	3.59	0.55	0.116
	T2	1161	3.62	0.55	
Does your job require creativity?	T1	1238	3.61	0.54	0.231
	T2	1155	3.58	0.58	
Does your job require doing the same tasks over and over again?	T1	1241	3.53	0.62	0.161
	T2	1168	3.49	0.65	
Do you have the possibility to decide for yourself how to carry out your work?	T1	1236	3.08	0.65	0.974
	T2	1162	3.08	0.67	
Do you have the possibility to decide for yourself what should be done in your work?	T1	1231	2.85	0.70	0.336
	T2	1159	2.88	0.74	
Items social support subscale					
There is a quiet and pleasant atmosphere at my place of work.	T1	1241	3.26	0.76	0.038
	T2	1167	3.20	0.72	
There is good collegiality at work.	T1	1239	3.56	0.60	0.024
	T2	1162	3.50	0.67	
My co-workers (colleagues) are there for me (support me).	T1	1237	3.63	0.55	0.290
	T2	1165	3.61	0.60	
People at work understand that I may have a 'bad' day.	T1	1238	3.51	0.64	0.410
	T2	1159	3.489	0.67	
I get along well with my supervisors.	T1	1238	3.70	0.54	0.511
	T2	1165	3.68	0.55	
I get along well with my co-workers.	T1	1242	3.79	0.45	0.225
	T2	1169	3.77	0.46	

[a]Item reversed before analyses = higher value indicates higher demand.

significantly greater opportunities to learn new things at T2, and this can also be situated in relation to the study by Narayanasamy and Penney (2014) who reported that coaching and providing feedback as a leader facilitates learning and professional development among staff. This has further been described to provide staff with a sense of control and confidence in the work environment, which are important predictors for job strain (Edvardsson et al., 2009).

Our findings further showed that higher leadership ratings were related to greater social support with stronger associations at T2. Willemse et al. (2012) reported that the negative impact of job demands was partially compensated for by a supportive leadership and by authorising staff to make their own decisions, and a more supportive work environment was created where staff were less sensitive to high demands. Seen in relation to this study's findings, this can be interpreted to mean that nursing home managers can, through their leadership, promote work relationships and social support. Based on a systematic review (Shirey, 2004), social support provided by managers is essential for staff perception of

TABLE 4 Multiple linear regressions models estimating the change in relation between leadership and the outcome from T1 to T2

	Independent variable: Leadership			Linear regression[a]	GEE[b]
Outcome		T1[c]	T2[c]	Δβ (*p*-value)	Δβ (*p*-value)
Job strain	Correlation[d]	−.291	−.400		
	β[a]	−.002	−.003	−.001 (.005)	−.001 (.021)
Social support	Correlation[d]	.353	.421		
	β[a]	.039	.050	.011 (.010)	.015 (.011)

[a]Results from multiple linear regression estimating the change in relation between Leadership and the outcome from T1 to T2.

[b]Results from multiple linear regression estimating the change in relation between Leadership and the outcome from T1 to T2. The analysis is performed with generalised estimating equations (taking into account correlation in nursing homes with an exchangeable correlation matrix) and adjusting for age, sex and education.

[c]All *p*-values <.001.

[d]Pearson correlation between Leadership and outcome.

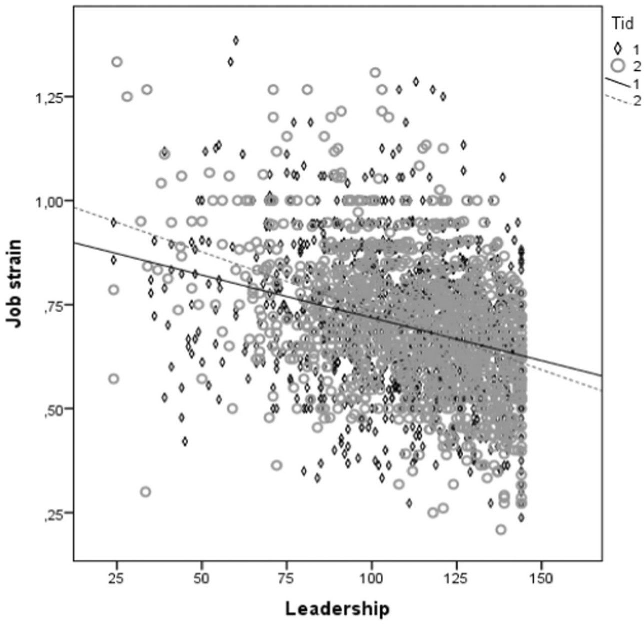

FIGURE 1 Scatter plot of GEE model estimating the change in relation between leadership and job strain between T1 and T2. Y-axis job strain and X-axis leadership

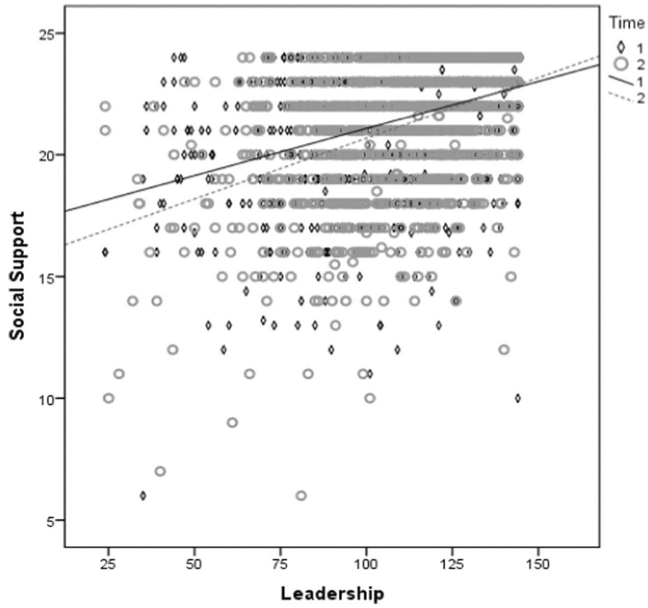

FIGURE 2 Scatter plot of GEE model estimating the change in relation between leadership and social support between T1 to T2. Y-axis social support and X-axis leadership

burnout, job satisfaction, well-being and intention to leave, thus giving further implications for managerial leadership. However, our results also showed a significant decrease in sense of collegiality among staff and a deteriorating work atmosphere at T2 indicating that leader support might not fully compensate for negative influences in the work environment. Prioritising and facilitating cohesion in the work group and positive relationships gives important implications for nursing home managers, and suggests research areas that need to be more closely explored and targeted in future interventions.

Between 2014 and 2019, the workforce characteristics had changed in terms of an increased proportion of enrolled nurses and a smaller proportion of nurse's assistants at T2 in matched units. It is an international trend that education levels are diminishing in aged care (OECD, 2020) and educational initiatives for staff in aged care have recently been proposed by the Swedish government to improve the competence among the aged care workforce (Swedish government, 2020). Furthermore, nurse assistants have been offered education initiatives to become enrolled nurses in order to increase knowledge-based care (SOU, 2017:21), which is a possible explanation for these findings. Thus, there seems to be a positive trend in terms of increasing the proportions of enrolled nurses (i.e. having upper secondary level schooling and up to 3 years of training), which is in line with the national plan in Sweden (SOU, 2017:21). Whether this trend remains consistent needs to be confirmed or rejected in the next longitudinal measurement. This study provides international contributions by replicating and confirming that the nursing home managers' leadership is closely associated with the staff work situation and that such leadership becomes more important over time. In summary, this study reports on important longitudinal changes implying that nursing home managers' leadership may need to be prioritised in these environments, especially in times of emerging staff shortages. Managers seem to have the capacity to employ leadership practices that can influence demand-control tensions in the work environments. Enabling managers with leadership qualities such as coaching and giving direct feedback, handling conflicts in a constructive way and having control of the work is of paramount importance for staff health and high-quality care of older people.

5 | STRENGTHS AND LIMITATIONS

The cross-sectional design does not permit causality which may be a limitation. However, the strength of this study is the longitudinal measurements from a large unique national sample of matched units, thus refining and replicating previous findings, which lends support to trends in the analyses. A study Cronbach's α of .50 in T1 and .49 in T2 for the demand/control subscale decision latitude (control) indicates that the internal consistency of that subscale is not up at the commonly used cut-off of 0.7. However, since the Cronbach's α is determined both by the length of the scale and the homogeneity of the sample (Bernardi, 1994; Tavakol & Dennick, 2011), a reasonable explanation is that this could be an artefact due to the brevity of the scale as well as the homogenous sample of the Swedish nursing home workforce. Still, further psychometric exploration of the scale is recommended in future studies. Another limitation is that this study was situated in Swedish aged care organisations following the Scandinavian welfare model. This differs from other organisational systems internationally and indicates a need for caution when making generalised inferences of the findings. Although this study is based on a large randomised repeated national sample, generalisation of the current findings to other international contexts needs further empirical examination. Also, further research is needed to explore the impact of sociodemographic changes and other socioeconomic aspects on staff work situation in times of increasing restraints and pressures. Also, since this study were conducted pre-pandemic, we recommend repeated measures post-pandemic, to evaluate whether and how the relationship between nursing home managers' leadership and the outcome measures of staff job strain and social support have been impacted by the pandemic.

6 | CONCLUSIONS

This study shows that nursing home managers who coach and give direct feedback to care staff, manage conflicts constructively and have control of the clinical work, may reduce job strain and increase perceptions of social support among staff. The strength in this study lies in longitudinally confirming that the leadership is of immense importance for staff strain and social support, increased workloads, decreasing collegiality and deteriorating atmosphere at work. Thus, managers with these leadership qualities are likely to positively influence the work situation of staff which in turn can assist in attracting and retaining a sustainable workforce well positioned to provide high-quality care and healthy life for older people in nursing home care.

7 | IMPLICATIONS FOR PRACTICE

In practice settings, managers need to be encouraged and supported to provide leadership of staff that includes leadership qualities of coaching and feedback, constructive handling of conflicts and work control to promote a positive workplace. Tailored leadership training based on the needs and direction of the organisation as well as the characteristics of the particular workforce and resident clientele may be warranted to enable the potential inherent in managerial leadership. In addition, the trend that staff report a higher workload and deteriorating collegiality and work atmosphere warrants reflection and action. Nursing home managers have a significant role in offering support and providing strategies that promote healthy work environment in order to prevent ill-health and loss of valuable direct care staff, which seem utterly important in the light of increasing demands in this context. There might be a place for leadership intervention here as well, where managers more closely take leadership of staff in clinical care provision, to coach and support them in providing high-quality care, as well as working with staff in balancing the demands, control and conflicts in the workplace.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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