Psychology, Society & Education (2024) 16(3), 31-40

Psychology, Society & Education

www.uco.es/ucopress/ojs/index.php/psye

Investigating self-rated health and wellbeing among teachers in Finland from a salutogenic perspective

Stina F. Lähteenmäki*[1], Lisbeth M. Fagerström[1 2] & Anna K. Forsman[1]

[1] *Åbo Akademi University, Vaasa (Finland)*
[2] *University of South-Eastern Norway, Drammen (Norway)*

Keywords

Occupational health
Salutogenic factors
Teachers
Sense of coherence
COVID-19

Abstract

The teaching profession is among the most stressful occupations associated with high workloads and stress. Teacher wellbeing has received increasing attention, as it is a key factor not only to the wellbeing of the teachers, but also to their students, as well as to the prosperity of the schools and communities alike. The present study aimed to investigate teacher wellbeing from a salutogenic perspective emphasizing positive health, wellbeing, and health promotion principles. A survey was sent to members of a trade union for Finnish teachers in spring 2020. In total, 1,312 teachers responded to the *Salutogenic Health Indicator Scale* (SHIS), the main measurement used in this study. About 81% of the respondents were women and the majority of the participants (91%) were over 30 years old. Findings from this cross-sectional study reveal that older teachers and teachers with longer work experience reported significantly better perception of energy, cognitive ability, and expression of feelings, compared to younger teachers with more limited work experience, as well as a decrease in perceived stress. In conclusion, older, more experienced teachers were seen to be better able to cope with workplace stressors compared to their younger counterparts, which presumably is linked to a stronger sense of coherence.

Investigando la salud autopercibida y el bienestar entre los docentes en Finlandia desde una perspectiva salutogénica

Palabras clave

Salud ocupacional
Factores salutogénicos
Docentes
Sentido de coherencia
COVID-19

Resumen

La profesión docente está entre las más estresantes debido a las altas cargas de trabajo y estrés. El bienestar de los docentes ha recibido una atención creciente, ya que es un factor clave no solo para el bienestar del profesorado, sino también para el de su alumnado, así como para la prosperidad de las escuelas y las comunidades. El presente estudio tuvo como objetivo investigar el bienestar de los docentes desde una perspectiva salutogénica, enfatizando principios de salud positiva, bienestar y promoción de la salud. En la primavera de 2020, se envió una encuesta a los miembros de un sindicato de profesores finlandeses. En total, 1,312 docentes respondieron a la *Escala Salutogénica de Indicadores de Salud*. Aproximadamente el 81% de los encuestados eran mujeres y la mayoría de los participantes (91%) tenía más de 30 años. Los resultados de este estudio transversal revelan que los docentes de mayor edad y con más experiencia laboral reportaron una percepción de la energía significativamente mejor, mayor capacidad cognitiva y expresión de sentimientos en comparación con los docentes más jóvenes con experiencia laboral más limitada, así como niveles inferiores de estrés. En conclusión, los docentes mayores y con más experiencia se mostraron más capaces de hacer frente a los factores estresantes en el lugar de trabajo en comparación con sus colegas más jóvenes, lo que presumiblemente está relacionado con un sentido de coherencia más fuerte.

* *Corresponding author:* Stina Lähteenmäki, Faculty of Education and Welfare Studies, Åbo Akademi University, Academill, Rantakatu 2, 65100 Vaasa, Finland. stina.lahteenmaki@abo.fi
Cite this article as: Lähteenmäki, S. F., Fagerström, L. M., & Forsman, A. K. (2024). Investigating self-rated health and wellbeing among teachers in Finland from a salutogenic perspective. *Psychology, Society & Education, 16*(3), 31-40. https://doi.org/10.21071/psye.v16i3.17096
Received: 4 May 2024. *First review*: 6 September 2024. *Accepted:* 12 November 2024.

ISSN 1989-709X | © 2024. Psy, Soc & Educ.

Whitin the school environment, a complex, dynamic, and metacontextual setting, a number of different social interactions occur each and every day: between the teacher and the student, between the teacher and parents, and between teachers and/or other representatives within or outside the school system regarding (e. g., school reforms, administration, and legislation issues). In school settings, unsolved, persisting problems related to social relations and interactions can result in teachers experiencing burnout (Pyhältö et al., 2011). Teachers today struggle with an extensive workload and their work situation has intensified (Ballet & Kelchtermans, 2009). Teachers work longer hours yet have less time for preparation, reflection and recovery; they must juggle an increasing number of diverse tasks, attend more meetings, and engage in more administrative work. Frequent political and/or administrative calls for change can even increase work-related pressure and stress on teachers, and teachers must balance such eventual changes with their own professionalism (Ballet & Kelchtermans, 2009).

Recently graduated and early career teachers often find teaching to be more stressful than more experienced teachers (Chaplain, 2008; Rieg et al., 2007). Nonetheless, while teachers can experience that their work is demanding, they also tend to find that teaching provides them with a sense of satisfaction and joy (Ahlgren & Gillander, 2011).

In earlier research on teachers' occupational health, a pathogenic focus has mainly been employed. To yield new understanding on the research topic, a salutogenic perspective was used in this study to explore teachers' self-rated health. A salutogenic perspective, in which a focus on assets, strengths, and motivation is included, can help reveal salutary factors through which health is actively promoted.

Education in Finland

Education is one of the cornerstones of the Finnish welfare society. Finland is officially a bilingual country, therefore education on all levels is provided in both the Finnish and Swedish languages (Ministry of Education and Culture, 2021). Teachers in Finland are given broad pedagogical autonomy, and as long as the national core curriculum, local curricula, and relevant legislation are followed, they are allowed to select the teaching methods, textbooks, and materials they use (Ministry of Education and Culture, 2021).

To ensure professional autonomy, a high level of training is emphasized. In general, teachers in early childhood education and care (children ages 0-6 years) typically hold a bachelor's degree, while teachers working within higher educational levels hold a master's degree. Basic education teachers (comprehensive school, grades 1-6) are required to hold a master's degree in Education, while subject teachers (grades 7-9) and upper secondary level (grades 10-12) teachers are required to hold a master's degree in their given subject as well as pedagogical studies. University teachers are usually required to hold a doctoral or other postgraduate degree (Ministry of Education and Culture, 2021).

For the most part, the overall educational system and teachers in Finland enjoy a good reputation. Finland differs from many countries in that, to date, teachers and the teaching profession are highly appreciated and applications to teacher education programs are numerous (Lonka, 2018). The national curriculum is updated each decade, and reforms and changes are continuously implemented.

Teachers' work situation in Finland

Due to various factors such as larger school classes (linked to decreased funding), heterogenous school classes (linked to immigration and the integration of pupils with special needs), and digitalization, the school environment in Finland is becoming more challenging (The Trade Union of Education in Finland, 2017-2021).

Follow-up surveys have shown that teachers in Finland experience more work-related stress than individuals in other occupations, and their self-rated work health has gradually decreased (The Trade Union of Education in Finland, 2017-2021). Teachers in Finland have described that they often experience unclear job descriptions, reorganizations, lack of support, and/or are tasked with achieving ambiguous goals or asked to perform a continuous stream of new tasks. Many teachers in Finland have furthermore reported that the resources needed to support students with special needs are lacking and that teachers subsequently are burdened with unrealistic expectations and demands. Some teachers have expressed that they "fight for survival" on a daily basis. Such overload has been seen to lead to longer working hours and reduced time for recovery. Many teachers also perceive that too much of their time is spent on administration and bureaucracy and instead advocate for more time for what they consider to be their main task: pedagogical matters and teaching (The Trade Union of Education in Finland, 2017-2021).

As seen in the results of a 2021 survey of members belonging to the Trade Union of Education in Finland, 57% of those responding had considered a career change (i. e., leaving teaching) in the year prior to the survey. The most commonly listed reasons for considering such a career change included work burden and increased workload (The Trade Union of Education in Finland, survey about career change, 2021). COVID-19 pandemic-related restrictions were also mentioned.

Salutogenesis, sense of coherence, and work-related sense of coherence

In the fields of health and work-related health research, a pathogenic perspective has traditionally dominated, in which a focus on the origins of disease and risk factors is employed. Seeking a different perspective, the sociologist Aaron Antonovsky focused on the origins of health and the individual's capacity and resources to create and maintain health despite experienced difficulties and distress. Concluding that life is a chaos in which individuals must constantly relate to change, Antonovsky introduced the concept sense of coherence (SOC). Antonovsky argued that individuals' life views and capacity to respond to stressful situations are reflected in their SOC and

allow them the opportunity to manage and adapt to a life in chaos (Antonovsky, 1979). As part of the salutogenic model of health, the dimensions of SOC are comprehensibility, meaningfulness, and manageability (Eriksson, 2017). Seen through the prism of salutogenesis, work-related SOC can be defined as the perceived comprehensibility, manageability, and meaningfulness of an individual's current work situation (Bauer et al., 2015; Vogt et al., 2013). Work-related SOC can even be considered a mediator within the relationship that exists between an individual's job resources and work engagement (i. e., indicators of positive health) and job demands and exhaustion (i. e., indicators of negative health) (Jenny et al., 2017). If health-promoting, salutogenic job characteristics are developed and promoted in the workplace, the pathogenic effects of stressors may not only be buffered but may even be diminished, which can have a direct impact on positive health outcomes (Jenny et al., 2017). In order to be salutogenic, work needs to be comprehensible, manageable, and meaningful, thereby supporting employees' SOC. Among teachers, a high SOC can be a positive predictor of mental health (Kuwato & Hirano, 2020; Seibt et al., 2013) and may constitute not only a protective factor on the individual level but may even contribute to a protective effect vis-à-vis collective (school-level) SOC (Ramberg et al., 2021). Still, because a focus on measures specifically designed to explore salutogenic resources among teachers has seldom been employed, a gap exists in the knowledge on teachers' salutogenic resources and work-related experiences.

An individual's SOC develops over the entire lifespan, i. e., SOC increases with age (Bauer et al., 2015; Feldt et al., 2007; Feldt et al., 2011; Nilsson et al., 2010). Those aged 30 or older appear to have more stable and increased SOC than younger adults (Feldt et al., 2007) and SOC appears to increase with age regardless of gender (Nilsson et al., 2010). People with a strong SOC might experience the demands of their work environment to be challenging, whereas an individual with a weak SOC might experience the same demands as threatening (Jenny et al., 2017). An individual with a high SOC may find it easier to employ own coping strategies and may feel confident that the resources needed to manage and/or cope with eventual demands exist (Jenny et al., 2017). Such "self-tuning" can be considered a resource through which to build salutogenic capacity (Eriksson, 2017; Eriksson & Mittelmark, 2017). In earlier research, group-level, collegial reflection has been found to constitute a salutogenic resource for teachers (Nilsson, 2017). Also, older teachers appear to recover from work better during leisure time than younger teachers, as the same time as age has been correlated with higher detachment, relaxation, control, and mastery (Virtanen et al., 2020).

In sum, based on earlier research, individuals' age, in general, affects their SOC and experience of wellbeing at work, but can this be applied to teachers and the school context?

The present study

The aim of this study was to explore self-rated health and wellbeing among teachers in Finland from a salutogenic perspective using the *Salutogenic Health Indicator Scale* (SHIS). Previous research has shown that a person's SOC increases with age and age has been associated with higher detachment, relaxation, control and mastery (e. g., Bauer et al., 2015, Virtanen et al., 2020). Furthermore, it has been found that recently graduated and early career teachers find teaching to be more stressful than more experienced teachers (e. g., Chaplain, 2008; Rieg et al., 2007). The first objective of the present study was to analyze whether age and work experience affect teachers' subjective ratings of their health and wellbeing. The first hypothesis was that older teachers with longer working careers and life experiences have developed better resilience skills, which in turn affects the subjective experience of their occupational health and wellbeing (e. g., Feldt et al., 2007; Feldt et al., 2011; Nilsson et al., 2010, Virtanen et al., 2020).

Gender is an important social determinant of health and wellbeing throughout a person's life course, and gender norms can be seen as a social driver of wellbeing (e. g., Diaz et al., 2022; Heise et al., 2019). Therefore, gender is regarded as a relevant variable in modern working life studies. The second objective was to examine whether gender affects the results of self-rated health and wellbeing of teachers. The second hypothesis was that male teachers rate their health and wellbeing higher than their female colleagues, as earlier research has revealed that men have higher psychological resilience levels than women (e. g., Kogar & Gök, 2021).

To be a caregiver can be both physically and mentally demanding and a person with care responsibility often has a burdensome life situation, which can create chronic stress that is harmful for their health and wellbeing (e. g., Mak et al., 2023, Schultz & Sherwood, 2008). From a health science and working life science point of view, care responsibility is therefore an interesting and important variable to study. Consequently, the third objective was to explore whether teachers' care responsibility affects their self-rated health and wellbeing status. The third hypothesis was that teachers that are caregivers rate their health and wellbeing lower than their colleagues that do not have care responsibility, as earlier studies have shown that caregivers have higher levels of depressive and anxiety symptoms (e. g., Mak et al., 2023).

Methods

Participants

The participants were teachers from all educational levels in Finland: early childhood education to university. The study was performed in cooperation with Finlands Svenska Lärarförbund (FSL), a trade union for teachers in Finland whose working language is Swedish. A total of 1,312 teachers completed the questionnaire (response rate 32%); 80.9 % (n = 1,058) identified themselves as women, 18.9 % (n = 247) as men, and 0.2% (n = 2) as "other". The participants of this study were 18 years of age or older. The majority of the participants (91%) were over 30 years old. Most of them (n = 966, 74%) worked on the comprehensive school level (grades 1-9). About 44% (n = 580) of the participants had over 20 years of work experience. A total of

592 (45%) were caregivers for a minor, parent/in-law, partner, or other individual. The descriptive statistics of the study participants are presented in Table 1.

Instruments

In this study, the 12-item *Salutogenic Health Indicator Scale* (SHIS) was used to measure participants' self-rated health and wellbeing status. The SHIS instrument has been validated in several studies (Bringsén et al., 2009, Garmy et al., 2017, Hult & Välimäki, 2023, Nilsson et al., 2019). It has been found that SHIS is a useful and reliable measure of adult workers' positive health, and it is capable of showing a person's conception of life as comprehensible, manageable, and meaningful (i. e., mobilizable resources of positive health) (Hult & Välimäki, 2023). The SHIS is related to a salutogenic and holistic description of health and wellbeing and it measures individuals' experience of physical, mental, and social wellbeing. The SHIS encompasses items relevant to experiences and/or perceptions of tension, illness, energy level, physical function, morale, sleep, feelings, concentration, creativity, ability to resolve issues, and social capacity. A six-point Likert scale is used for the responses; with even numbers and no neutral middle point, participants must select either *For* or *Against* responses. Reverse scoring calculation is used, with one (1) indicating a negative reply and six (6) indicating a positive reply. The SHIS allows for the calculation of three main indexes for each participant: intrapersonal characteristics (IPC), interactive function (IAF), and health complete (HC) (Bringsén et al., 2009). Understood as the interactions between different subsystems within an individual, IPC is calculated from the sum of seven SHIS items (items A, B, C, D, I, J, and L, score ranges from 7-42). Understood as individual-environmental interaction, IAF is calculated from the sum of 5 SHIS items (items E, F, G, H, and K, score ranges from 5-30). Understood as the holistic view of an individual's health (total health index), HC is calculated from the sum of all 12 SHIS items (score ranges from 12-72). An overview of the items included in the SHIS instrument is presented in Appendix 1.

The Cronbach's alpha coefficient for IPC was .89; for IAF, .84; and for HC/the whole SHIS instrument, .92.

The HC index value can also be standardized in order to get a comparable value between 0-100%. The standardization

Table 1

Descriptive statistics of the study participants

Baseline characteristics	Values	Participants	Valid %
Age (years)	18-30	120	9.2
	31-50	712	54.4
	≥ 51	477	36.4
	Total	1,309	100
Gender	Female	1,058	80.9
	Male	247	18.9
	Other	2	0.2
	Total	1,307	100
Workplace	Comprehensive school grades 1-6	602	46.2
	Comprehensive school grades 7-9	364	28
	Upper secondary/vocational school	183	14.1
	Other, e. g., University	153	11.8
	Total	1,302	100
Work experience(years)	< 2	49	3.7
	2-5	123	9.4
	6-9	148	11.3
	10-19	412	31.4
	20-29	381	29
	≥ 30	199	15.2
	Total	1,312	100
Care responsibility	None	713	54.6
	Minor	567	43.4
	Parent/in-law	17	1.3
	Partner	3	0.2
	Total	1,305	100

Note. Valid % = missing data has been excluded from the calculations.

is done by calculating 100* (index value - lowest possible index value) / (highest possible index value - lowest possible index value). The standardized value can be a basis for dialogue at individual or group level. Guidelines for interpreting standardized HC on a group or individual level have been presented by the creators of the SHIS instrument as follows: ≤ 55 %, the health score is poor and health promotion interventions are needed; 55.1-70 %, the health score is satisfactory but needs to be addressed and health promotion interventions are needed; 70.1-80 %, the health scores are at a good level and indicates a relatively positive perception of health in the group, and existing health resources and areas for improvement need to be identified and prioritized; > 80 %, the health score is at an excellent level and indicates a positive perception of health in the group, which is important to maintain with continuous and systematic health efforts (SHIS, 2022).

In addition to the above-described measures, the survey also included demographic questions about the participants' age, gender, workplace, work experience, and care responsibility. The participants were asked to indicate their age by choosing one of the following categories: 18-30 years (representing young adults), 31-50 years (representing middle adulthood), and 51 years or over (representing late adulthood). These categories were used in order to capture the participants' varying phases in life. Gender was measured with a 3-group variable: male, female, and other. Workplace categories were comprehensive school grades 1-6, comprehensive school grades 7-9, upper secondary/vocational school, and other. The question about work experience included six categories, ranging from "under 2 years" to "30 years or more" of work experience. Care responsibility categories were four: none, for a minor, for a parent/in-law, and for a partner.

Procedure

An electronic questionnaire was sent to the 4,051 members of the FSL trade union on March 30th, 2020, exactly two weeks after a national emergency was declared in Finland because of the COVID-19 pandemic. Among other restrictions, contact teaching was suspended and teaching was instead organized through different arrangements as distance learning. As an entirely new and unexpected situation, this was a very challenging time for teachers. Inclusion criteria included work experience as a teacher; student teacher trade union members were subsequently excluded. Participants were informed that participation in the study was voluntary, and responses would be treated in confidence in an online (separate) attachment to the SHIS questionnaire. The study aim was included in the introduction to the SHIS questionnaire. Approval for the research plan for the study was granted by the Board for Research Ethics at Åbo Akademi University (FEN) in February 2020. Guidelines delineated by the Finnish National Board on Research Integrity TENK were followed throughout the entire research project.

Data analyses

The IBM SPSS Statistics version 26 software was used for descriptive data analysis. As the SHIS questionnaire is a Likert scale and the data were not normally distributed (test of normality Shapiro-Wilk $p < .001$, Kolmogorov-Smirnov $p < .001$), the nonparametric test Spearman's rank correlation test was used, with central tendency measured by calculating median (Schober et al., 2018). Correlations between SHIS main indexes (IAF, IPC, HC) and the variables Age, Work experience, Gender, and Care responsibility were also analyzed. Prior to analysis, the variables Gender and Care responsibility were dichotomized. For the variable Gender, there were three alternative answers in the survey: Female, Male, and Other. Two participants replied Other, for which responses were treated as missing values and excluded. The variable Gender was dichotomized to Female/Male. The variable Care responsibility was dichotomized to Yes/No.

The HC index values were also standardized according to the standardization process described above.

Results

The study results are reported according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement (Von Elm et al., 2008). The median, mean, and SD of the main indexes IPC, IAF, and HC are presented in Table 2.

Results of the correlation analyses are presented in Table 3. Positive correlations were found between the age and all three main SHIS indexes (IAF, IPC, HC). No statistically significant correlation was identified between the variable Work experience and IPC, but there were positive correlations between the variable and IAF and HC. Older teachers and teachers with longer work experience had higher HC. No statistically significant correlation between the participants' gender and the three main SHIS indexes (IAF, IPC, HC) were found. The variable Care responsibility correlated negatively with the SHIS indexes IAF and HC, whereas no correlation with IPC was found. Consequently, participants who were caregivers were seen to have lower HC.

Table 2

Median, mean, and SD for the main indexes of SHIS

	Scores (min-max)	Median	Mean	*SD*
IPC	7-42	27	26.81	6.82
IAF	5-30	21	20.75	4.49
HC	12-72	48	47.29	10.81

Table 3

Correlations between SHIS dimensions and demographic characteristics

	Age[1]	Gender	Work experience	Care responsibility[2]
IAF	.11**	.03	.1**	-.06*
IPC	.07*	.05	.05	-.04
HC	.08**	.05	.07*	-.06*

Note. [1]Dichotomic (0 = Male); [2]Dichotomic (0 = No).
*$p < .05$; **$p < .01$

Table 4

Standardized Health Complete (HC)

Index 0-100 (%)	*N*	%
0-55	545	41.5
55.1-70	409	31.2
70.1-80	234	17.8
80.1-100	123	9.4
Missing system	1	0.1

Of the participants, 41.5% had a health score of 0-55%, whereas 9.4% of the respondents had a health score of 80.1-100%. Results are presented in Table 4.

Discussion

The aim of this study was to explore self-rated health and wellbeing among teachers and to analyze whether age, work experience, gender, and care responsibility affect the ratings. Older teachers and teachers with longer work experience reported higher HC, i. e., better health and wellbeing. The first hypothesis was thus confirmed. The results seen in this study are in line with previous research, which have shown that SOC increases with age (Feldt et al., 2007; Feldt et al., 2011; Nilsson et al., 2010) and that older teachers seem to recover from work better during leisure time than younger teachers, as age has been correlated with higher detachment, relaxation, control, and mastery (Virtanen et al., 2020). The interpretation is that older teachers have developed better recovery and resilience skills due to their longer work and life experiences (e. g., Bauer et al., 2015, Feldt et al., 2007, Virtanen et al., 2020).

Recently graduated and early career teachers often find teaching to be more stressful than more experienced teachers (Chaplain, 2008; Rieg et al., 2007), which is in line with the findings of the present study. It is important that new teachers are supported, especially at the beginning of their careers, since earlier research has shown that group-level, collegial reflection constitutes a salutogenic resource for teachers (Nilsson, 2017). Support from colleagues has also been found to be a very important predictor of teacher well-being in other studies (Skaalvik & Skaalvik, 2018) and teachers who receive social support have been found to be better able to manage uncertainty and unanticipated challenges at work (Day & Gu, 2010).

Although the traditional male role has changed (e. g., Evans et al., 2013), women still experience higher levels of conflict between work and family life (e. g., Behson, 2002; Crompton, 2006; Nielson et al., 2001; Yavas et al, 2008). A meta-analysis study on gender differences in psychological resilience, conducted by Kogar and Gök (2021), revealed that men had higher psychological resilience levels than women. In the present study, no statistically significant correlations between gender and the main indexes (IAF, IPC, HC) were found. The second hypothesis, that male teachers rate their health and wellbeing higher than their female colleagues, was thus not confirmed.

In the present study, teachers with care responsibilities had lower HC scores than their colleagues that were not caregivers. The third hypothesis of this study was thus confirmed. This is also in line with previous research (e. g., Mak et al., 2023, Schultz & Sherwood, 2008).

A cause of concern is the relatively low HC scores that were identified in the study. About 73% of the teachers participating in the study had standardized HC of 0-70%, which is on a poor-satisfactory level according to the threshold values. This is in line with previous studies (e. g., Madigan et al., 2023), and indicates that health promotion interventions are needed in school context, and naturally they must be conducted on a municipal or school level, in order to develop local effective health promotion action plans for teachers. As standardized HC can be useful both on individual and group level, it could help schools mapping out the possible challenges they face, and at the individual level the HC can be used as a basis for health communication and follow ups (e.g., employee performance interviews) (SHIS, 2022).

The experience of successful coping may strengthen individuals' future SOC (Jenny et al., 2017) and presumably also improve their recovery and resilience skills. Furthermore, "self-tuning" is considered to be a resource through which to

build salutogenic capacity (Eriksson, 2017; Eriksson & Mittelmark, 2017). Support for and the development of SOC should be introduced into teacher education programs. Teachers can better respond and adapt to stressors in the work environment when their SOC is strengthened, which long-term could lead to beneficial health and well-being outcomes not only for the teachers themselves but even indirectly for those they teach, since teachers' well-being has been linked to students' well-being in previous studies (Day, 2011; Klusmann et al., 2016; Koh et al., 1995). Healthy and engaged teachers have been found to perform and meet educational goals better than teachers with symptoms of burnout (Guglielmi & Tatrow, 1998; Rudow, 1999). Working life of today, including school context, is demanding, and therefore it is important to support teachers in different career paths and life situations, aiming at maintaining /improving their workability. The demographic shift, with an aging population and an aging workforce alike, as well as the need for prolonged working careers, also constitute future challenges in a European context (Eurofound, 2024).

Salutogenic leadership could be an important method in this context, as it entails promoting health and wellbeing within organizations, particularly in educational settings, and it focuses on workers' strengths, holistic wellbeing, and resilience building, as well as the importance of collegial collaboration within the organization. Salutogenic leadership has a recourse-driven perspective, with a focus on supporting the positive development and problem-solving approaches, instead of risks and problem-driven approaches. This in turn strengthens the individual's SOC (Hansson, 2010).

Study strengths, limitations, and directions for future research

In comparison to other instruments that measure SOC, the SHIS questionnaire is more user-friendly because of its shortness (Bringsén et al., 2009). A recent study has shown that SHIS can be used in population studies that understand health as a holistic resource, and a salutogenic approach to health is needed today, as focus gradually is shifting from treatment and prevention to health promotion (Hult & Välimäki, 2023). However, because health is a broad and complex concept, some important health-related dimensions may have been overlooked. The relatively large study sample of over 1,300 participants in the study at hand, could be considered a strength. The survey used in this study was sent out in March 2020, thus it is possible that the ongoing COVID-19 pandemic may have negatively affected the response rate (32%) and participants' responses. Also, although the correlations found were statistically significant, they were relatively low, which challenges the interpretation of the study findings. In a follow-up study, further analyses of the SHIS instrument and its associations with other positive health outcomes will be conducted to deepen the understanding of the feasibility of the SHIS instrument.

Teachers' work situation is known to be challenging, and it became even more burdensome in spring 2020 due to the COVID-19 pandemic. Based on the findings, it is evident that teachers' work situation problems need to be mapped out locally and appropriate actions must be taken in order to improve teachers' working conditions and wellbeing. Successful health promoting action plans and educational contexts whereby work health for teachers is promoted, should be developed, aiming at strengthening teachers' health and wellbeing (and their SOC, i. e., salutogenic approach). Further research is needed to identify salutogenetic factors in teachers' working lives (on the individual and group levels, but also including gender perspective) and to explore salutogenic resources in teachers' private lives. More research on salutogenic leadership in school context is recommended. Care givers are in a vulnerable situation and further research concerning teachers who are caregivers, is also recommended.

Conclusions

Older teachers and teachers with longer work experience rated their health and wellbeing higher than younger teachers and teachers with shorter work experience. No associations between gender and subjective health ratings were found. Teachers with care responsibility had lower total health scores than teachers that were not caregivers. By encouraging teachers to foster a healthy work-life balance and by promoting supportive work environments, the health and wellbeing of teachers could be enhanced. It is recommended that educational leaders would learn and embrace salutogenic leadership, as both teachers and their students could benefit from it.

Author contributions

Conceptualization: S.F.L, L.M.F, A.K.F.
Data curation: S.F.L.
Writing – original draft: S.F.L, L.M.F, A.K.F.

Funding

This work has been funded by The Swedish Cultural Foundation in Finland [160143, 2020]. This funding source had no role in the design of this study, data collection, management, analysis, and interpretation of data, writing of the manuscript, and the decision to submit the manuscript for publication.

Declaration of interests

The authors declare that there is no conflict of interest.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author.

References

Ahlgren, C., & Gillander Gådin, K. (2011). Struggle for time to teach: Teachers' experiences of their work situation. *Work*, *40*(1), 111-118. https://doi.org/10.3233/wor-2011-1272

Antonovsky, A. (1979). *Health, stress and coping*. Jossey-Bass.

Ballet, K., & Kelchtermans, G. (2009). Struggling with workload: Primary teachers experience of intensification. *Teaching and Teacher Education*, *25*(8), 1150-1157. https://doi.org/10.1016/j.tate.2009.02.012

Bauer, G. F., Vogt, K., Inauen, A., & Jenny, G. (2015). Work-SOC- Entwicklung und validierung einer skala zur erfassung des arbeitsbezogenen kohärenzgefuhls. *Zeitschrift für Gesundheitspsychologie*, *23*(1), 20-30. https://doi.org/10.1026/0943-8149/a000132

Behson, S. J., (2002). Coping with family-to-work conflict: The role of informal work accommodations to family. *Journal of Occupational Health Psychology*, *7*(4), 324-341. https://doi.org/10.1037/1076-8998.7.4.324

Bringsén, Å., Andersson, H. I., & Ejlertsson, G. (2009). Development and quality analysis of the Salutogenic Indicator Scale (SHIS). *Scandinavian Journal of Public Health*, *37*(1), 13-19. https://doi.org/10.1177/1403494808098919

Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. *Educational Psychology*, *28*(2), 195-209. https://doi.org/10.1080/01443410701491858

Crompton, R. (2006). *Employment and the family: the reconfiguration of work and family life in contemporary societies*. Cambridge University Press. https://doi.org/10.1017/CBO9780511488962

Day, C., & Gu, Q. (2010) *The new lives of teachers* (1st ed). Taylor and Francis Ltd.

Day, D. (2011). Leadership development. In A. Byrman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE Handbook of Leadership* (pp. 37-50). SAGE.

Díaz, A., Oramas, M. J. G., & Matud, M. P. (2022). Editorial: Gender and wellbeing. *Frontiers in Psychology*, *13*, Article 108114. https://doi.org/10.3389/fpsyg.2022.1080114

Eriksson, M. (2017). The sense of coherence in the salutogenic model of health. In M. B. Mittelmark, S. Sagy, M. Eriksson, G. F. Bauer, J. M. Pelikan, B. Lindström, & G. A. Espnes (Eds.), *The Handbook of Salutogenesis* (pp. 91-95). Springer International Publishing. https://doi.org/10.1007/978-3-319-04600-6_11

Eriksson, M., Mittelmark, M. B. (2017). The sense of coherence and its measurement. In M. B. Mittelmark, S. Sagy, M. Eriksson, G. F. Bauer, J. M. Pelikan, B. Lindström, & G. A. Espnes (Eds.), *The Handbook of Salutogenesis* (pp. 97-102). Springer International Publishing. https://doi.org/10.1007/978-3-319-04600-6_12

Eurofound (2024, November 3). *Living longer, working longer: How to further activate an aging workforce*. https://www.eurofound.europa.eu/en/blog/2024/living-longer-working-longer-how-further-activate-ageing-workforce

Evans, A. M., Carney, J. S., & Wilkinson, M. (2013). Work-life balance for men: Counseling implications. *Journal of Counseling and Development*, *91*, 436-441. https://doi.org/10.1002/j.1556-6676.2013.00115.x

Feldt, T., Leskinen, E., Koskenvuo, M., Suominen, S., Vahtera, J., & Kivimäki, M. (2011). Development of sense of coherence in adulthood: A person-centered approach. The Population-Based HeSSup Cohort Study. *Quality of Life Research*, *20,* 69-79. https://doi.org/10.1007/s11136-010-9720-7

Feldt, T., Lintula, H., Suominen, S., Koskenvuo, M., Vahtera, J., & Kivimäki M. (2007). Structural validity and temporal stability of the 13-item sense of coherence scale: Prospective evidence from the population-based HeSSup study. *Quality of Life Research*, *16*, 483-93. https://doi.org/10.1007/s11136-006-9130-z

Garmy, P., Berg, A., Clausson, E. K., Hagell, P., Jakobsson, U. (2017). Psychometric analysis of the Salutogenic Health Indicator Scale (SHIS) in adolescents. *Scandinavian Journal of Public Health*, *45*(3), 253-259. https://doi.org/10.1177/1403494816680801

Guglielmi, R. S., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research*, *68*(1), 61-99. https://doi.org/10.3102/00346543068001061

Hansson, A. (2010). *Salutogent ledarskap för hälsosam framgång* [Salutogenic Leadership as a tool for health promotion]. Fortbildning A. B.

Heise, L., Greene, M. E., Opper, N., Stavropoulou, M., Harper, C., Nascimiento, M., & Zewdie, D. (2019). Gender inequality and restrictive gender norms: Framing the challenges to health. *The Lancet*, *393*(10189), 2440-2454. https://doi.org/10.1016/S0140-6736(19)30652-X

Hult, M., & Välimäki, T. (2023). Care workers' positive health during the COVID-19 pandemic: Psychometric properties of the Finnish version of the Salutogenic Health Indicator Scale and an 18-month follow-up. *Work*, *74*(4), 1289-1298. https://doi.org/10.3233/WOR-220383

Jenny, G. J., Bauer, G. F., Vinje, H. F., Vogt, K., & Torp, S. (2017). The application of salutogenesis to work. In M. B. Mittelmark, S. Sagy, M. Eriksson, G. F. Bauer, J. M. Pelikan, B. Lindström, & G. A. Espnes (Eds.), *The Handbook of Salutogenesis* (pp. 197-210). Springer International Publishing. https://doi.org/10.1007/978-3-319-04600-6_20

Klusmann, U., Richter, D., & Ludtke, O. (2016). Teachers' emotional exhaustion is negatively related to students' achievement: Evidence from a large-scale assessment study. *Journal of Education Psychology*, *108*(8), 1193-203. https://doi.org/10.1037/edu0000125

Koğar Yılmaz, E., & Gök, A. (2021). A meta-analysis study on gender differences in psychological resilience levels. *Cyprus Turkish Journal of Psychiatry & Psychology, 3*(2), 132-143. https://doi.org/10.35365/ctjpp.21.2.15

Koh, W., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior*, *16*(4), 319-333. https://doi.org/10.1002/job.4030160404

Kuwato, M., & Hirano, Y. (2020). Sense of coherence, occupational stressors, and mental health among Japanese high school teachers in Nagasaki prefecture: A multiple regression analysis. *BMC Public Health*, *20*, Article 1355. https://doi.org/10.1186/s12889-020-09475-x

Lonka, K. (2018). *Phenomenal learning from Finland*. Edita Publishing.

Madigan, D. J., Kim, L. E., Glandorf, H. L., & Kavanagh, O. (2023). Teacher burnout and physical health: A systematic review. *International Journal of Educational Research, 119,* Article 102173. https://doi.org/10.1016/j.ijer.2023.102173

Mak, H. W., Bu, F., & Fancourt, D. (2023). Mental health and wellbeing among people with informal caring responsibilities across different time points during the COVID-19 pandemic: A population-based propensity score matching analysis. *Perspectives in Public Health*, *143*(5), 275-284. https://doi.org/10.1177/17579139221104973

Ministry of Education and Culture, Finnish National Agency for Education (2021, December 29). *Education in Finland. Finnish education in a nutshell*. https://www.oph.fi/en/statistics-and-publications/publications/finnish-education- nutshell

Nielson, T. R., Carlson, D. S., & Lankau, M. J. (2001). The supportive mentor as a means of reducing work-family conflict. *Journal of Vocational Behavior*, *59*(3), 364-381.

Nilsson Lindström P., Ejlertsson G., Andersson I., & Bringsén, Å. (2019). Evaluating the usability of two salutogenic instruments on health and work experience, using cognitive interviewing. *Journal of Workplace Behavioral Health*, *33*(3-4), 241-259. https://doi.org/10.1080/15555240.2018.1521725

Nilsson, K., Leppert, J., Simonsson, B., & Starrin, B. (2010). Sense of coherence (SOC) and psychological well-being (GHQ): Improvement with age. *Journal of Epidemiology and Community Health, 64,* 347-352. https://doi.org/10.1136/jech.2008.081174

Nilsson, M. (2017). *Salutogenic resources in the everyday lives of teachers. Promoting workplace learning and well-being* [PhD Thesis, Lund University]. Lund University Research Portal. https://portal.research.lu.se/en/publications/salutogenic-resources-in-the-everyday-lives-of-teachers-promoting

Pyhältö, K., Pietarinen, J., & Salmela-Aro, K. (2011). Teacher-working-environment fit as a framework for burnout experiences by Finnish teachers. *Teaching and Teacher Education, 27*(7), 1101-1110. https://doi.org/10.1016/j.tate.2011.05.006

Ramberg, J., Brolin Låftman, S., Nilbrink, J., Olsson, G., & Toivanen, S. (2021). Job strain and sense of coherence: Associations with stress-related outcomes among teachers. *Scandinavian Journal of Public Health*, *50*(5), 565-574. https://doi.org/10.1177/14034948211011812

Rieg, S. A., Paquette, K. R., & Chen, Y. (2007). Coping with stress: An investigation of novice teachers' stressors in the elementary classroom. *Education, 128(2),* 211-226.

Rudow, B. (1999). Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In R. Vandenberghe & A. M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice*. Cambridge University Press. https://doi.org/10.1017/CBO9780511527784.004

Salmela-Aro, K., Hietajärvi, L., & Lonka, K. (2019). Work burnout and engagement profiles among teachers. *Frontiers in Psychology*, *10*, Article 2254. https://doi.org/10.3389/fpsyg.2019.02254

Schober, P., Boer, C., Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, *126*(5), 1763-1768. https://doi.org/10.1213/ANE.0000000000002864

Schulz R., & Sherwood, P. R. (2008). Physical and mental health effects of family caregiving. *American Journal of Nursing*, *108*(9), 23-27. https://doi.org/10.1097/01.NAJ.0000336406.45248.4c

Seibt, R., Spitzer, S., Druschke, D., Scheuch, K., & Hinz, A. (2013). Predictors of mental health in female teachers. *International Journal of Occupational Medicine and Environmental Health*, *26*(6), 856-869. https://doi.org/10.2478/s13382-013-0161-8

SHIS (2024, October 13). *SHIS - Salutogenic Health Indicator Scale*. https://www.hkr.se/en/research/man--health--society/survey-instruments-shis-and-wems/shis/

Skaalvik, E., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and wellbeing. *Social Psychology of Education*, *21*, 1251-1275. https://doi.org/10.1007/s11218-018-9464-8

The Trade Union of Education in Finland (Opetusalan Ammattijärjestö, OAJ). (2022, March 27). *Opetusalan työolobarometri 2017.* https://www.oaj.fi/globalassets/julkaisut/2018/tyoolobarometri_final_0905_sivut.pdf

The Trade Union of Education in Finland (Opetusalan Ammattijärjestö, OAJ). (2021, December 29). *Opetusalan työolobarometri 2019.* https://www.oaj.fi/contentassets/14b569b3740b404f99026bc901ec75c7/opetusalan_tyoolobarometri_2019_nettiin.pdf

The Trade Union of Education in Finland (Opetusalan Ammattijärjestö, OAJ). (2022, March 27). *Opetusalan työolobarometri 2021.* https://www.oaj.fi/contentassets/14b569b3740b404f99026bc901ec75c7/oaj_opetusalan_tyoolobarometri_2021.pdf

The Trade Union of Education in Finland (Opetusalan Ammattijärjestö, OAJ). (2021, December 28). *Survey about career change 2021.* https://www.oaj.fi/en/news/news-and-press-releases/2021/alanvaihtokysely-09-21/

Virtanen, A., De Bloom, J., & Kinnunen, U. (2020). Relationships between recovery experiences and well-being among younger and older teachers. *International Archives of Occupational and Environmental Health*, *93,* 213-227. https://doi.org/10.1007/s00420-019-01475-8

Vogt, K., Jenny, G. J., & Bauer, G. F. (2013). Comprehensibility, manageability and meaningfulness at work: Construct validity of a scale measuring work-related sense of coherence. *SA Journal of Industrial Psychology*, *39*(1), Article a1111. https://doi.org/10.4102/sajip.v39i1.1111

Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2008). STROBE Initiative. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: Guidelines for reporting observational studies. *PLoS Medicine*, *4*(10), Article e296. https://doi.org/10.1371/journal.pmed.0040296

Yavas, U., Babakus, E., & Karatepe, O. M. (2008). Attitudinal and behavioral consequences of work- family conflict and family-work conflict: Does gender matter? *International Journal of Service Industry Management*, *19*(1), 7-31. https://doi.org/10.1108/09564230810855699

Appendix 1

Salutogenic Health Indicator Scale (SHIS) survey form

How have you felt in the last 4 weeks with regard to the following? In the last four weeks, I have…

Table 4

Standardized Health Complete (HC)

A. Felt alert	6	5	4	3	2	1	Felt tired, exhausted
B. Felt happy, optimistic	6	5	4	3	2	1	Felt depressed, sad
C. Felt calm, relaxed	6	5	4	3	2	1	Felt worried, tense
D. Slept well	6	5	4	3	2	1	Slept badly
E. Found it easy to concentrate	6	5	4	3	2	1	Found it hard to concentrate
F. Had lots of ideas, been creative	6	5	4	3	2	1	Have been lacking ideas, not been creative
G. Have made decisions easily	6	5	4	3	2	1	Have been at a loss what to do, hesitant
H. Have been emotionally balanced	6	5	4	3	2	1	Have been emotionally imbalanced
I. Felt well	6	5	4	3	2	1	Felt sick
J. Have had lots of energy	6	5	4	3	2	1	Have had very little energy
K. Functioned well with other people	6	5	4	3	2	1	Not functioned well with other people
L. Felt that my body has functioned well in relation to what my life situation needs	6	5	4	3	2	1	Felt that my body has not functioned well in relation to what my life situation needs

Stina F. Lähteenmäki, Lisbeth M. Fagerström,
Anna K. Forsman

Investigating self-rated health and wellbeing among teachers in Finland from a salutogenic perspective
Investigando la salud autopercibida y el bienestar entre los docentes en Finlandia desde una perspectiva salutogénica

Psychology, Society & Education
vol. 16, no. 3, p. 31 - 40, 2024
Universidad de Córdoba,
ISSN: 2171-2085

DOI: https://doi.org/10.21071/psye.v16i3.17096