





# Managers of micro-sized enterprises and Covid-19: impact on business operations, work-life balance and well-being

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#### **ABSTRACT**

The aim of this study is to identify how managers of micro-sized enterprises experience the impact of the Covid-19 pandemic on their business operations, work-life balance and well-being. Further, the study aims to make comparisons between managers of micro-sized businesses and managers of small-sized businesses. This mixed-method study is based on qualitative interviews with ten managers of micro-sized enterprises and a questionnaire answered by 95 managers of micro-sized and small-sized enterprises in regions in the north of Sweden. Managers of microsized enterprises reported significantly worse scores for mental well-being, job satisfaction and life satisfaction in comparison with managers of small-sized enterprises. Three themes emerged from the qualitative analysis: Changed leadership role, Impact on private life and Impact on wellbeing. In the interviews, the managers of micro-sized enterprises reported that the pandemic had increased their workload and forced them to mobilise strategies for enterprise survival. This study indicates that managers of micro-sized enterprises had changed their leadership role and increased their workload and number of work tasks, including supporting the employees, developing strategies for business survival and applying for governmental support. However, the managers demonstrated creativity in finding new solutions for their enterprises.

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#### **KEYWORDS**

Managers of micro-sized enterprises; self-employed; well-being; health; rural area: Covid-19

#### Introduction

This study focuses on how managers in micro-sized enterprises in Sweden experience the impact of the Covid-19 pandemic on their business, work-life balance and well-being. In this study, a manager of a microsized enterprise may be both the owner and the manager, or only the manager of the enterprise. The term "self-employed" is also commonly used in research to refer to an owner of an enterprise. These self-employed people may either work alone or have employees in their enterprise.

The Covid-19 health crisis has and will continue to affect the health and socio-economic situation of millions of people and enterprises across the globe [1,2]. Research highlights that there is a risk of a range of negative health effects for individuals, such as severe mental health consequences due to the shut-down of enterprises, lay-off and dismissal of employees, and social distancing measures leading to loneliness [3]. Micro-sized enterprises with fewer than ten employees are particularly vulnerable to the impact of the crisis because they have fewer resources than small-sized enterprises (with 10-49 employees), they face a high risk of income loss and it is difficult for them to interact

with customers due to restrictions on mobility [1,4,5]. In addition, it can be assumed that the pandemic will present new challenges and increase the number of work tasks and the workload for managers of microsized enterprises. According to a European investigation related to experiences of the pandemic [1], selfemployed people that most often are owners of a micro-enterprise reported significantly higher job insecurity and a worse domestic financial situation compared to employees. A recent study shows that the disproportionate reduction in hours and income for self-employed people led to a deterioration in subjective well-being compared to salaried workers [6].

Many countries have introduced measures to deal with the pandemic, such as income protection, expansion of paid sick-leave, adjustment support, deferred tax and financial turnover support [2], covering different groups of micro-enterprises. In Sweden, the central government had led the provision of business support with schemes to subsidise rent for those enterprises that have been most negatively affected by the crisis [2]. The main business support provided in Sweden included social security contributions, income support measures for individuals and households, tax deferrals,

bank loans for micro-sized and small-sized enterprises, capital injections in strategically important companies and support for start-ups of micro-sized enterprises [2]. However, a recent study shows that around 50% of selfemployed Swedish people and managers in microsized enterprises have not applied for governmental support because they do not fulfil the relevant criteria [7]. In Sweden, around 50% of micro-sized and smallsized enterprises reported a deterioration in the profitability of their business due to reduced demand for their products, problems with the supply chain since many borders were closed and problems reaching customers [8]. However, around one in ten microenterprises reported increased profitability during the pandemic due to an increased demand for their products and the fact that their operations are highly digitalised.

Self-employed people are a growing working group in many countries, comprising somewhere between 8 and 31% of the working populations in European countries [9]. In Sweden, around 10% of the working population is self-employed, and the number of microenterprises and self-employed people without employees accounts for 96% of the total number of enterprises [10]. Research into how micro-enterprises and their managers have been affected by the pandemic is important because they are seen as key drivers of economic growth, innovation, employment and social integration [11-14]. Good working conditions are essential to ensuring both the well-being of managers and workers and the long-term economic survival of these enterprises [11,12].

In light of this, the aim of this study is to identify how managers of micro-sized enterprises experience the impact of the Covid-19 pandemic on their businesses, work-life balance and well-being. Further, the study aims to make comparisons between managers of micro-sized enterprises and small-sized enterprises, and to contribute to the body of knowledge about the extent to which these managers have received different governmental support and how they view such support. The research uses a mixed method design comprised of qualitative interviews with ten managers in micro-sized enterprises and a questionnaire answered by 95 managers in micro-sized and small-sized enterprises in northern Sweden regions.

# Being a manager in a micro-sized enterprise

It is assumed that when being a manager in a microsized enterprise you have to handle higher risks of work-related ill-health among employees than for employees in small-sized enterprises due to limited economic and personnel resources for implementing workplace environment improvements [15–17]. According to an analysis by the Swedish Work Environment Authority [17], occupational health and safety management is less advanced in microenterprises compared with small enterprises with limited routines to deal with these matters. One explanation for this fact is that managers of micro-sized enterprises report that they have limited time to work with occupational health and safety issues [17]. However, interviews with Swedish managers in microsized enterprises show that they want to invest in workplace conditions and employee health, although they perceive they have limited competence related to tools for process improvement [18-20]. Being a manager in a micro-enterprise often means long and irregular working hours and work in the evenings and at weekends [21,22]. In addition, they are exposed to high levels of pressure, as well as high work demands and responsibilities [13,23,24]. However, they have a high level of job control and more freedom to determine which different work tasks to do and how to do them [22,25,26]. Research also shows that a high level of job control leads to a high level of work engagement [27].

When it comes to work-life balance, a large number of studies show that work has a more negative interaction with private life for self-employed people (with and without employees) and micro-enterprise managers, compared to employees in organisations [23,28-30]. Parasuraman & Simmers [31] found that although selfemployed people reported greater autonomy in their work role than employees, they also experienced greater conflict between work and family life and lower satisfaction with family life. It is particularly those self-employed people that have employees who experience higher levels of conflict between work and family circumstances [30]. In contrast, research shows that being self-employed can help in managing the competing demands of work and family [30,32] by providing work flexibility. The Job Demands-Resources (JD-R) model is a theoretical model suggesting that each job has a unique combination of job demands, i.e. physical and psychological factors, and job resources, i.e. factors reducing job demands, which lead to positive health outcomes, learning and growth [33]. Self-employment is often associated with flexible work arrangements and great job control, suggesting that self-employed people would be less susceptible to work interfering with family and family interfering with work [34].

A large number of studies have shown that selfemployed people and managers in micro-sized enterprises report higher levels of job satisfaction and

subjective well-being than those employed in larger organisations [25,26,35,36]. Some of the suggested reasons for these results are that self-employed people and managers in micro-sized enterprises have high levels of autonomy, flexibility and a strong feeling of pursuing their goals [37]. However, there are also studies showing worse subjective well-being among groups of the self-employed and managers in micro-sized enterprises [38,39]. European studies conclude that managers with 1-9 employees report more fatigue and stress but a higher degree of job satisfaction than full-time employees. Stress factors such as high uncertainty, responsibility and time pressure over longer time periods can result in mental and physical illness [25]. Other studies have found no health differences between selfemployed people and organisational employees. In one Swedish study, employees who subsequently started their own businesses were more satisfied with their jobs, but no differences were found in self-rated health indicators between self-employed people and employees [35]. One explanation for the above contradictory results could be the heterogeneity of self-employed people and managers of micro-sized enterprises [9,27]. According to a Eurofound investigation [9], the majority of European self-employed people, both with and without employees, report high well-being, but around one fifth report a worse level of well-being.

In summary, extensive research shows that selfemployed people and managers in micro-sized enterprises are exposed to demanding psychosocial working conditions. However, their roles are also characterised by good working conditions, such as flexibility and greater job control. When it comes to research about work-life balance and well-being among this working group, the results are contradictory. One explanation for this may be that they vary in terms of motivation for their job, individual resources, sector, age and gender.

# Materials and methods

# Study design and sample

This mixed-methods study analysed managers of microsized enterprises' experiences of the Covid-19 pandemic during the period of October 2020 to February 2021. A questionnaire was answered by 95 managers in micro-sized and small-sized enterprises and qualitative interviews were conducted with ten managers in micro-sized enterprises (with less than 10 employees) in regions across the north of Sweden. More specifically, the analysis focused on how these managers rated different governmental support measures related to the pandemic, as well as the impact on their businesses, work-life balance and well-being. Using different types of data may contribute to a greater, more holistic understanding of the researched field. The quantitative data provides a possibility to gain a deeper understanding of the areas studied, and the qualitative data can facilitate increased understanding of how the managers perceive the impact of the pandemic on their business operations, work-life balance and well-being. By collecting quantitative and qualitative data at roughly the same time, it is possible to compare results and create a solid foundation for drawing conclusions about the study results [40]. The sample is a non-probability sample; however, it represents common Swedish sectors and managers of micro-sized and small-sized enterprises.

The managers interviewed were given information about the study and were informed that their participation was voluntary before they answered the questionnaire, and the interviews were conducted. The study was approved by the Swedish Ethical Review Authority (Dnr 2020-05223).

#### **Ouestionnaire** data

The quantitative methodology used in this research was based on an e-survey used by Eurofound to capture the immediate impact of the Covid-19 pandemic on the way people in Europe live and work [1]. Most of the questions are based on Eurofound's European Quality of Life Survey (EQLS) and European Working Conditions Survey (EWCS), while some questions are new [1]. The EQLS and EWCS use validated questions and thorough procedures for questionnaire construction, sampling and interviewing when comparing individuals in European countries [1]. Permission has been granted for us to use these questions.

The web-based cross-sectional survey was distributed to managers by email with a link to the survey provided by Netigate (https://www.netigate.net/). Distribution was carried out by two Swedish business confederations - the Swedish Confederation of Small Businesses (https://www.svensktnaringsliv.se/english/) and a regional confederation of small businesses (https://www.samlingnaringsliv.se/). The questionnaire was electronic and anonymous, with responses received from 170 managers, 95 of which were managers in micro-sized and small-sized enterprises. The response rate was 50%. The questionnaire consisted of 76 questions divided into four clearly differentiated sections: background information, working conditions, work-life balance and well-being, and questions about the Covid-19 pandemic.

In terms of how the managers experienced the impact on their business operations, Working hours was measured via the question "During the last month, how many hours have you worked per week on average?". Change in working hours was measured via the single-item question "During the Covid-19 pandemic have your working hours ...?". The scale was 1–5 (1 = increased significantly, 5 = decreased significantly).An index for Perception of financial support included four questions about the manager's attitude regarding whether support measures were clear and transparent, whether it was easy and efficient to get financial support, whether financial support was fair, and whether the financial support reached those who needed it most. The scale was 1-4 (1 = not agree, 4 = agree totally) and Cronbach's alpha was 0.88. Work/contract reduction was measured via the single-item question "During the Covid-19 pandemic have you lost your job-(s)/contract(s)?". The scale was 1-2 (1 = yes, permanently or temporarily, 2 = no). An index for Work-life balance included five questions about feeling worried when not working, being too tired to do household chores after work, about work preventing time for their family, finding it difficult to concentrate on their job because of family responsibilities, and that family responsibilities limited time for their job. The scale was 1-5 (1 = always, 5 = never) and Cronbach's alpha was 0.86.

The following variables were analysed related to well-being outcomes. Life satisfaction was measured by a single-item guestion: "All things considered, how satisfied would you say you are with your life these days?". The scale was 1-10 (1 = very dissatisfied, 10 = very satisfied). Job satisfaction was measured via the question "In general, are you satisfied, not particularly satisfied or not satisfied at all, with the working conditions of your job?". The scale was 1-4 (1 = not satisfied at all, 4 = very satisfied). Mental well-being is a broad concept widely studied by the 5-item World Health Organization Well-Being Index (WHO-5), which assesses subjective psychological well-being [41]. In the present study we called this index mental well-being consisting of five items including the respondent's perceptions over the last two weeks related to feeling cheerful and in good spirits, calm and relaxed, active and vigorous, fresh and rested, and interested in things generally. The mental well-being index had a 6-point response scale (1 = all the time, 6 = never) and the calculated Cronbach's alpha was 0.91. Self-reported health was measured by the single-item question "In general, how is your health?". The scale was 1-5 (1 = very bad, 5 = very good). This question has been widely used as an epidemiological instrument to

predict different health-related outcomes [42]. Sickness presence was measured by the single-item question "During the last 12 months have you worked even when you were sick?". The scale was 1-2 (1 = yes, 2 = no). For all variables/indices, the mean values were calculated with low values indicating bad conditions and high values indicating good conditions.

Statistical analyses consisted of descriptive statistics for socio-economic data calculated using percentages. Factor analyses (principal component analysis) were performed for variables measuring mental well-being, work-life balance and attitude to financial support and Cronbach's alpha values were computed in order to estimate the internal reliability (i.e. internal consistency) of these variables (alpha values of 0.70 and over were deemed acceptable). Comparisons between managers in micro-sized enterprises (with fewer than ten employees) and managers in small-sized enterprises (with 10 or more employees) were performed using a t-test to measure differences/similarities between the two groups based on independent samples tests. All statistical analyses were carried out using IBM SPSS Statistics 27.

# **Qualitative interviews**

To achieve a deeper understanding of the managers' experiences of their conditions during the Covid-19 pandemic, the survey questionnaire data were complemented with interviews with ten managers in microsized enterprises. The managers represented enterprises in the service sector with between one to nine employees, including: hotels, restaurants, health consultants, hairdressers, educational consultants and IT companies. Table 1 describes the characteristics of the sample used.

Semi-structured interviews were conducted that included questions about background information (age, gender, years as managers and type of business), the manager's leadership role (e.g. demands and responsibility, workload, leadership behaviours and leadership support from business and workplace health actors), work-life balance (e.g. impact of work on private and family life and working from home), well-being (e.g. impact on physical and mental health), and how the Covid-19 pandemic and governmental financial support had influenced these factors and the enterprise. The interviews were conducted at the participant's office or at other locations such as a booked room at a library, with the exception of one interview that was carried out online. Six interviews were conducted by one of the researchers (PD) and four were done by the other researcher (SV). The interviews lasted between 30

Table 1. Demographic data.

Number of managers of micro-sized enterprises	
Gender	
Men	4
Women	6
Age	
30–40	2
41–50	5
51–60	2
> 61	1
Education	
Vocational training school	2
Upper secondary school	5
University	3
Civil status	
Married/cohabiting	7
Single	3
Years as self employed	
< 5	3
6–10	5
> 11	2
Position	
Manager and owner	4
Manager	6

and 60 minutes and were audio recorded and transcribed by the researchers.

The interview data were analysed using qualitative content analysis as described by Graneheim and Lundman [43] and later modified according to Graneheim et al. [44]. First, the scripts were read several times for the researchers to familiarise themselves with the data, and notes were written together with written notes from the interview sessions. Next, short sentences and meaningful elements were marked and coded. After the initial coding process, the next step was to compare the codes to identify similarities and disparities and then cluster these into categories. At this stage, the authors systematically discussed the codes and categories until consensus was reached. In the final analytical discussion, three unifying themes were identified. Although the process is presented as linear, it involved constant abductive reasoning back and forth to obtain the managers' views in the findings [43,44]. In addition, the managers' answers to the open-ended questions in the questionnaire were analysed and sorted into categories.

#### Results

This section first presents the results from the survey questionnaire. Thereafter, results from manager interviews and open-ended questions in the managers' questionnaires are presented.

### Survey questionnaire results

Of all the 95 managers included in the study, 30% were women, the mean age was 53.2 years, 67% had

Table 2. Comparisons between managers in micro-sized enterprises (n = 59) and managers in small-sized enterprises (n = 36), mean values and SD.

Managers in micro-sized enterprises (<10 employees)		Managers in small-sized enterprises (>10 employees)			
Mean	SD	Mean	SD	t	Sign.
40.0	33.8	53.6	38.2	-1.78	0.08
3.52	1.20	2.92	0.87	2.85	0.01
1.78	0.77	1.97	0.72	-1.16	0.25
1.67	0.48	1.81	0.40	-1.55	0.12
3.35	0.93	3.60	0.65	-1.51	0.13
6.43	2.41	7.33	2.00	-1.97	0.05
3.10	0.77	3.46	0.66	-2.31	0.02
3.43	0.98	3.93	0.80	-2.50	0.01
3.66	0.88	4.00	0.92	-1.76	80.0
1.47	0.50	1.64	0.49	-1.57	0.12
	Manag micro enter (< emplo Mean 40.0 3.52 1.78 1.67 3.35 6.43 3.10 3.43 3.66	Managers in micro-sized enterprises (<10 employees)  Mean SD  40.0 33.8 3.52 1.20 1.78 0.77  1.67 0.48 3.35 0.93  6.43 2.41 3.10 0.77 3.43 0.98 3.66 0.88	Managers in micro-sized enterprises (<10 employees)         Managers in small enter prises enter (> 10 employees)           Mean         SD         Mean           40.0         33.8         53.6           3.52         1.20         2.92           1.78         0.77         1.97           1.67         0.48         1.81           3.35         0.93         3.60           6.43         2.41         7.33           3.10         0.77         3.46           3.43         0.98         3.93           3.66         0.88         4.00	Managers in micro-sized enterprises (<10 employees)         Managers in small-sized enterprises (>10 employees)           Mean         SD         Mean         SD           40.0         33.8         53.6         38.2           3.52         1.20         2.92         0.87           1.78         0.77         1.97         0.72           1.67         0.48         1.81         0.40           3.35         0.93         3.60         0.65           6.43         2.41         7.33         2.00           3.10         0.77         3.46         0.66           3.43         0.98         3.93         0.80           3.66         0.88         4.00         0.92	Managers in micro-sized enterprises (<10 cmployees)         Managers in small-sized enterprises (<10 cmployees)           Mean         SD         Mean         SD         t           40.0         33.8         53.6         38.2         −1.78           3.52         1.20         2.92         0.87         2.85           1.78         0.77         1.97         0.72         −1.16           1.67         0.48         1.81         0.40         −1.55           3.35         0.93         3.60         0.65         −1.51           6.43         2.41         7.33         2.00         −1.97           3.10         0.77         3.46         0.66         −2.31           3.43         0.98         3.93         0.80         −2.50           3.66         0.88         4.00         0.92         −1.76

a university education, 90% were married or cohabitated, and 52% had at least one child at home. There were no significant differences between managers of micro-sized enterprises and managers of small-sized enterprises in terms of these socio-economic data.

Table 2 below shows that in comparison with managers of small-sized enterprises, managers of microsized enterprises reported significantly worse scores for life satisfaction, job satisfaction and mental wellbeing. Further, micro-enterprise managers reported lower scores for self-reported health and sickness presence, although these differences were not significant. Managers of micro-sized enterprises demonstrated lower scores for the variables work-life balance, perception of financial support and work/contract reduction, although not to a significant extent. Concerning the change in working hours, managers in micro-sized enterprises reported significantly lower scores compared to managers in small-sized enterprises. The latter group reported a larger quantity of weekly working hours, although this was not significant.

# **Manager interviews**

The content analysis of the transcripts resulted in three themes: changed leadership role, impact of work on private life and impact on well-being. Five categories emerged: increased workload, changed leadership behaviour, decreased work-life balance, worse mental health and worse physical health (Table 3).

# Changed leadership role

Based on the managers' experiences of their role as a leader, a number of different areas of responsibility,



Table 3. Themes and categories developed from the qualitative analysis.

Changed leadership role	Impact of work on private life	Impact on well- being
Increased workload Changed leadership	Decreased work-life balance	Worse mental health
behaviour		Worse physical health

expectations and requirements could be deduced. It is clear that the leaders were expected to fulfil a number of different roles such as coordinating, motivating, and being creative and an organiser. The majority of the managers described that they spent a lot of time thinking about how to develop new services and win new customers, or offering new services to existing customers.

### One of the managers said:

"I would be lying if I said that I was not affected by Covid, but in my ... when you work with health, that's when I really get going. Our customers are employers, what can we help them with? Can we help them with risk assessment? ... Create new ways to help companies and new business for us? Can we guite simply transform completely?" (IP 3)

# Another manager said:

The company's survival, finding new models, finding new markets, approaches that also meant we could reach out with our message, so that it was relevant, it was really important to be quick. (IP 4)

Another area that involved a change in working methods was that most of the managers interviewed were forced to approach financial matters differently. Some of the managers were used to having a good customer flow and planning customer meetings a long time in advance. However, in the wake of the pandemic, they described that weekly planning became the norm given that the customer base decreased. At an early stage in the pandemic, all managers were forced to account for potential revenues, potential losses and the consequences.

"And that was because I was constantly waiting ... when this (pandemic) comes to our region and there are no more patients, I have to pull together the capital required, so that I can survive if I don't have any patients for four months. After all, I have guite large expenses, I have a loan I am repaying and it is around 20,000 a month and then I have rent and it is also around 20,000 a month, and then I need my salary, so it takes about 100,000 a month for my business to break even." (IP 3)

All managers expressed that they experienced an increased workload in some form in conjunction with the emergence of the pandemic. One of the interviewees said:

Absolutely, I felt both stressed and pressured to somehow find a new niche in the new world we live in, where you have to be both a little realistic and a little visionary, you have to dare, you have to have courage... . For example, when it looked like everything had collapsed in the spring, everything was cancelled, we could have just packed up and gone home. We no longer existed. This would have been one way of dealing with the situation because one didn't believe in it. Instead I have tried to turn it around to find opportunities. (IP 2)

There was one common aspect related to the experience of increased workload, which primarily came down to the safety of their own staff, as all interviewees worked with people in one way or another.

"One thing is the business. The other is my staff. My staff are exposed to meetings with people all the time and I want them to have a good work environment, they should feel safe at work, I want them to be healthy. "(IP 2)

### Another manager said:

Driven to generate new business so that the people here have jobs and then everyone's jobs are secure. That's the most important thing, but it's all so uncertain. (IP 2)

Most of the managers expressed that time was scarce and that matters such as analysing decisions, reflection and calculation of potential consequences of decisions were almost non-existent in their new work reality. Instead, the managers expressed that guick decisions mattered. One of the interviewees explained it as follows:

We have come to a point where I really realize that I am important as a leader ... That I have to direct correctly. I have to make the right decision ... and we had to make decisions quickly. So instead of analysing, you do a swot analysis, you look at just that bit and you have to do everything so fast. (IP 1)

Most of the managers seemed to have experienced that they were able to deal with the various changes. The changes brought about by the pandemic were probably not desired by these leaders, but they were apparently able to handle the unwelcome changes positively. One manager said:

"At the same time we need to be out helping employers and giving them ideas. For the leadership here, it's important to develop our business so that people have jobs and don't need to be made redundant. We must find new ways. What can we come up with? And get people involved. What business can it generate for us?



And what are the needs out there, what problems and questions are other managers dealing with? (IP 2)

# Impact of work on private life

Almost all managers expressed that their work affected their private lives to some extent. It was clear that the increased workload meant that work spilled over into their private lives and reduced opportunity for rest and recovery. One manager had less time for himself and for his daughter. Another interviewee felt that his tiredness when he came home affected his private life. For some managers, the impact was in the form of taking work home in the evening.

"I've felt that I've spent a lot of time on administration in the evenings as I've been working in production during the day". (IP 1)

# Another manager said:

"My role as a manager has changed during the pandemic and I now have to work 60 hours a week with a lot of administrative tasks in the evenings. I also work more in production and feel a greater responsibility to keep the business going despite a dramatic loss of customers." (IP 7)

However, there were interviewees who deviated in terms of how work life affected their private time. For one manager, the work situation had changed a lot with customer visits decreasing, as an example. Much of the manager's time was spent trying to find new methods to retain customers and sell services. Another manager admitted that his brain was nonetheless constantly in full swing, but that his private life was not affected by his own work situation:

"I do not think the stress is cumbersome, I live alone and have grown children. Yes my brain is going all the time but I don't think I suffer from it." (IP 3)

The managers perceived that their own time and time for family members has become limited. In addition, their own lack of exercise and general fatigue have been factors that have affected their ability to balance work and family life. However, none of the interviewees expressed that aspects at home were the main reasons behind difficulties in achieving the balance.

# Impact on well-being

The result is a great emotional impact as managers seem to have largely been dealing with uncertainty both about the virus as such and its development, while also constantly planning, doing and acting on behalf of the company based on the progression of the virus and how society handles it. This illustrates that the managers' health has been affected physically and also mentally. Indeed mental health and well-being have been affected more than physical health.

Working throughout the Covid-19 pandemic has affected the mental health of all the managers in one way or another. The different managers highlight various aspects of mental health, but one common denominator is concern in its different forms. One type of concern was about the uncertainty of the future, which the interviewees expressed in "what if?" questions. All managers attempted to predict the future through different questions without finding any answers, which affected them emotionally. The managers expressed concerns about their ability to continue to keep the company going, the concerns of their own staff, what would happen if they became ill and the health of their relatives. One manager explained that:

"The corona virus came as a shock. It became a concern. I'm not usually a worried person but I noticed I became so. Will I get sick, or will most of our able-bodied people in the workplace get sick? If yes, what happens then?" (IP 1)

# Another manager said:

"I feel mental pressure and get stressed when I have to give negative messages to employees. Many of them have been here for years and it's tough to give them these messages. I take this home with me after work." (IP 8)

Another aspect worth highlighting in terms of the impact on the mental health of the interviewees is that in addition to concerns, different forms of stress were present expressed in different ways. A picture emerges from the managers interviewed that the stress has affected their own well-being.

"Since we work with companies and everyone worries, our entire business became worried and initially calendars became empty. Planned meetings were cancelled and then you get a little stressed." (IP 2)

For another manager, stress was related to financial stress:

"I didn't go on holiday with that same nice feeling as we didn't really know what the autumn would be like. How bad? It feels more comfortable now but it's still shaky. That's how it is, you can never just sit back and rest." (IP 4)

Regarding the physical aspect, one of the interviewees stated that he felt more tired when he returned home from work:

"I'm tired when I get home. I fall asleep on the couch if I lie down on my back. On paper it doesn't look like I work much more than 40 hours, it is 42 or something. But that is really 44 or 45 because I only have a half-



hour lunch, 15 minutes' morning break and no afternoon break." (IP 3)

For another manager, physical health was impacted due to the lack of time for one's own physical activity. They expressed this as:

"I have not had time to exercise." (IP 1)

# Managers' views expressed in the open-ended questions

Through open-ended questions in the questionnaire, the managers gave their views on lessons learned for their company and society. Additionally, they reflected on how the pandemic had affected their actions related to workplace environment and employee health.

Several managers reflected on the importance of being proactive and being prepared for crisis by having strategies in place to handle new situations. One manager said:

"Never rely on any form of public support ("society"). Always be able to stand on your own two feet, even in harsh times. Always have a really large buffer, which I have had, which has come in handy."

Several managers were critical to the different types of financial support from governmental actions, and expressed that the government was too slow and that measures were more suited to large enterprises. Several comments were made by the managers related to governmental support, including: the need for faster action from governmental authorities related to different financial measures; support needing to be adapted to different business sectors; the requirement for greater dialogue between government authority representatives and managers in small enterprises; and that financial support must be easy to obtain with clear rules. One manager stated:

"Don't put the entire industry in the same boat, many people in crisis industries still find a way through. By being classified as a "crisis industry" we have become distrusted and had difficulties with government authorities."

#### Another manager said:

"Crisis preparedness must exist and cost money and resources. Crisis preparedness has been neglected in Sweden for too long and there must be a long-term change. For us small business owners, there needs to be expertise with real-life knowledge about the conditions we actually face. Currently it seems that decisionmakers are too far from the everyday life of most small business owners. For example, it felt like they completely ignored the large group of sole traders throughout the first half of the year."

When asked about how workplace environment and health have been handled in the enterprises during the pandemic, several mangers emphasised that they focused on hygiene matters such as routines for social distancing, using face masks and implementing advice from the Swedish Public Health Institute. In addition, some managers noted that employees and customers were more worried and there was an increased level of working from home. One manager expressed:

"I have changed from most of the time working on-site at my customers' premises with face-to-face courses to working from home, inventing new approaches to work and ways to reach out to customers. Physically, this has meant that I have had to invest in furniture and technical equipment for online work and office work. I miss human contact enormously and feel lonelier than before Covid-19."

#### **Discussion**

The aim of this study was to explore how managers of micro-sized enterprises in the north of Sweden experienced the impact of the Covid-19 pandemic crisis on their business operations, work-life balance and wellbeing. To gain a solid understanding of these issues, a mixed-methods design was used including interviews and a questionnaire [40]. It is of great relevance to study micro-enterprises and their managers in relation to the pandemic because of their dominance in working life [9], and because studies have shown that they may be negatively affected by the pandemic in several ways [9]. For example, the pandemic is a threat as their enterprises have few resources, they may have difficulties in sustaining their businesses to survive, and the pandemic may negatively affect the well-being and work-life balance of the managers [7,45].

The questionnaire results show that managers of micro-sized enterprises, in comparison with managers of small-sized enterprises, had significantly lower scores for life satisfaction, job satisfaction and mental wellbeing. There also tended to be lower scores for selfreported health as well as sickness presence for managers of micro-sized enterprises, although this was not significant. There were no significant differences between the two groups of managers in terms of how the pandemic had influenced work/contract reduction nor in their perception of financial support, although the scores were lower for managers in micro-sized enterprises. The interview results indicate that the pandemic has changed the leadership of managers of micro-sized enterprises with their focus shifting to how to find new solutions for their businesses and employees, and that their workload had increased due

to taking on new responsibilities and tasks. In terms of work-life balance, several of the managers experienced that they had less time for private life activities, more work in the evenings and less time for rest and recovery outside work. Finally, when reflecting on well-being, the managers expressed that stress and uncertainty about the future had negatively affected their mental health.

The differences found in the impact on business operations, work-life balance and well-being outcomes between the two groups of managers are in line with research showing that managers in micro-sized enterprises are exposed to demanding working conditions and have limited economic and personnel resources in their enterprises [16,19]. Concerning well-being, research using the same well-being index shows that the pandemic has had a negative impact on the psychological distress and well-being of other persons in leadership positions [46]. In addition, another explanation may be that micro-sized enterprises and their managers are more vulnerable to external influences such as the Covid-19 crisis due to a higher risk of losing customers and income. This line of reasoning is in line with several other investigations [1,5,7]. For example, a European investigation during the pandemic shows that a high proportion of self-employed people, both with and without employees, indicated that they were either "very likely" or "rather likely" to lose their jobs in the next three months [1].

The interviews of managers of micro-sized enterprises showed a significantly increased work-load durpandemic related to security responsibility for their employees, more dialogue with employees, contacts with customers and finding solutions for new products and services. The managers also indicated that they had limited in-house resources and limited time for handling many of the consequences of the pandemic. According to the JD-R model [33], this imbalance between psychological demands and work resources can lead to a worse work-life balance and increased ill-health for the managers. Research studies have used the model for managers in micro-sized enterprises showing that they are exposed to stress factors such as a lack of financial resources, social support and time, which are associated with risks of different ill-health outcomes [47].

The managers of micro-sized enterprises reported worse scores in the work-life balance index compared to managers of small-sized enterprises managers, although not at a significant level. This result is consistent with the interview results showing that work negatively affected their private lives through less time for rest and recovery, thinking about work and less time for family activities. Extensive research supports these results showing that work interacts more negatively with private life among self-employed people (both those with and without employees) compared to those employed in organisations [12,36].

The fact that managers of micro-sized enterprises report worse scores related to different well-being outcomes compared to managers of small-sized enterprises is not in line with consistent research showing that self-employed people (often working in microsized enterprises) express high well-being. Explanations beyond the scope of these results could be that the consequences of the pandemic, such as increased workload, reduced work hours, stress and worry for the managers, have negatively affected their well-being and health. This is partly supported by the interviews, in which some of the managers also indicate that they have less time for their own health activities. The results are supported by a recent investigation in England showing that the pandemic had negatively impacted entrepreneurs' mental well-being, life satisfaction and stress [20]. In addition, a study showed that reduction in work hours and income of self-employed people directly contributed to decreased subjective well-being compared to those employed in organisations [6].

One important study result is that managers of both micro and small enterprises report low scores for perception of financial support including questions about whether the government support was easy to access, fair and reached those who needed it most. One pattern that emerged from the open-ended questions is that several managers were critical to government support and deemed that it was more suited to large enterprises. These results are supported by a recent Swedish investigation showing that nearly half of the self-employed people studied had not tried to apply for support from governmental measures [7].

Although the pandemic has negatively affected the managers of micro-sized enterprises, the interviews and open-ended questions demonstrate that the managers mobilised strategies to deal with the pandemic's consequences and find new solutions for their businesses. Several managers tried to support their employees, develop new working methods, products and services, and reach new customers. This result is in line with recent investigations in England and Sweden [5,7]. In addition, research shows that managers of micro-sized enterprises can be creative in finding new solutions for workplace improvements even though they have limited in-house resources for such work [18-20,48].

There are some obvious limitations and strengths of this study. One limitation is that the sample of managers answering the questionnaire is small and not randomly selected with a response rate of 50%. Therefore, we do not know if the managers are representative of micro-sized enterprise managers in this sector in general. However, they represent many normal enterprises in the north of Sweden. One strength is that the study is based on a mixed-methods approach, including managers' own perceptions of how they have been affected by the pandemic. Another strength is that the questionnaire items have been used in other European investigations including validated questions. Although the number of interviews is satisfactory, one must remember that the aim of qualitative research is not to extend findings derived from selected samples to the world at large, but rather to transform and apply them to similar situations in other contexts [49].

# **Conclusions and implications**

One of the conclusions that can be drawn from this study is that managers of micro-sized enterprises have been negatively affected by the Covid-19 pandemic in several ways. In addition to an already high work-load with many work tasks, the pandemic has changed their leadership role and increased the managers' work-load and number of work tasks further, including supporting the employees, developing strategies for business survival and applying for governmental support. Another conclusion is that the pandemic has negatively impacted the managers' well-being and work-life balance. Although the managers expressed that it is difficult to access government support, they demonstrate creativity in finding new solutions for their enterprises.

The results of this study imply that it is important that managers of micro-sized enterprises receive support for handling extended work tasks, reduced wellbeing and work-life balance, and strategies for developing their businesses. When considering working conditions and health issues, the study implies that consultants such as those in occupational health services should increase the amount of support they provide to micro-sized enterprise managers. This is supported by earlier research concerning support for occupational health and safety improvements in microsized enterprises [16,18,50]. Further, in the business development area, governmental actors and business networks can be valuable for helping the enterprises generate ideas about how to find new solutions, products and services. It is also particularly important to adapt government financial support to micro-sized enterprises, make it more efficient to access and ensure that it reaches the most vulnerable sectors and enterprises. For future research, both qualitative and quantitative studies in larger samples in different sectors will be valuable. In addition, more longitudinal studies are needed related to the business conditions, work-life balance and well-being of managers of micro-sized enterprises before, during and after the pandemic.

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