

Research conducted by:



CONSEQUENCES OF THE COVID-19 PANDEMIC ON THE SME MANAGEMENT AND THE PSYCHOLOGICAL HEALTH OF ENTREPRENEURS (twelve-month follow-up)

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THE RESEARCH PROJECT



The COVID-19 pandemic has led to considerable social and economic upheaval. Starting in March 2020, the Canadian provinces imposed confinement measures on individuals and closed certain businesses or industries. Some were able to continue their operations but had to reorganize their workplaces to comply with the guidelines set forth by public health authorities. During the period from March to October 2020, these restrictions increased and were subsequently gradually relaxed, notwithstanding a few exceptions. However, no business can escape the new public health guidelines. This is the context in which this study aims to shed light on the consequences of these upheavals on SME management and the psychological health of entrepreneurs. This summary of findings constitutes the analysis of the fourth and last data collection (twelve-month follow-up) on this longitudinal project including the recruitment (June 2020), the first follow-up (November 2020), the second follow-up (February 2021), then the present follow-up which is the last of the series (June 2021). It will also present the different tendencies observed throughout this research.

METHODOLOGY AND SAMPLE



The total sample includes **197 people** in business who responded to the data collection carried out in June 2021 and who had answered the initial questionnaire in June 2020. The sample is made up of respondents from Quebec (86.5%), Ontario (3.2%), Alberta (9.6%) and Saskatchewan (0.6%). It is mainly made up of women (56.5%), white people (87%) with an undergraduate university degree (39%). The age ranges from 22 to 75 years old. Most have one (11.8%), two (35.9%) or three (13.3%) children. Companies had a pre-pandemic turnover of less than CAD 100 000 (median) and hired an average of 5.6 employees. The main sectors of activity represented are professional, scientific and technical services (26.6%), other services (13.5%), health care and social assistance (9.9%) and retail trade (9.4%).

The sampling technique does not make it possible to obtain a sample that is representative of the entrepreneurs in Canada. It is also necessary to consider the issues related to attrition (i.e. loss of respondents in the follow-ups) which are not taken into account in the analyses.

CONSEQUENCES OF THE PANDEMIC ON THE SMEs



When answering in June 2021 and asking the situation since February 2021, almost half of the sample (49%) saw their sales increase (41.4% in February 2021), 14.4% saw their sales remain intact, while the others had a slight or greater decrease (36.6%). In February, the decrease in sales had affected more entrepreneurs (49%). Sales grew as the Canadian economy opened up and the vaccination campaign progressed. Regarding the changes in the number of employees, 61.1% had no change (55.9% in February were in this situation), some experienced an increase (31.1% versus 33.3% in February), and the rest had layoffs (7.8% versus 10.7% in February). While 11.7% found it easy to recruit good employees (44.8% in February), 78.3% felt it was rather difficult.

The increase in entrepreneurs who found it difficult to recruit good employees (78.3% versus 50.6% in February) may partly explain the decrease in layoffs, but also illustrates labor recruitment issues for these companies. In terms of profitability, 45.4% believe that next year's level of profitability will be enough to pay their full-time salary and more (39.2% in February and 37,6% in October), while 24% (versus 21.9% in February) believe that next year will be a little profitable, but not enough to live on it, and 16.3% believe that the income will be equivalent to the expenses (20% in February). 14.3% of respondents believe that next year will be in deficit (18.9% in February). Also, 38.8% are satisfied with the financial performance of their post-pandemic business, which is a higher percentage than in February 2021 (31.3%). Overall, performance seems to be improving for the sample, which is auspicious.

The partial opening of the Canadian economy, made possible by the progress of vaccination campaigns and the decrease in cases, has had an impact on improving sales and reducing employee layoffs. However, the difficulty of recruiting good employees remains a problem for entrepreneurs during this period.

In terms of optimism, we find that 79.9% are rather optimistic about their business development for the next year (scale of -10 to +10) (78.5% in February, 70% in October and 71.5% in July). Their optimism is more or less high regarding the overall economic conditions for the next year, with 73.2% who are optimistic. However, this rate is improving compared to previous periods when 62.8% in February and only 43.6% in October 2020 were optimistic. Figures 1 and 2 respectively present the evolution of the level of optimism regarding the company development and the level of optimism regarding the economic situation (scale from -10-Very pessimistic to +10-Very optimistic).

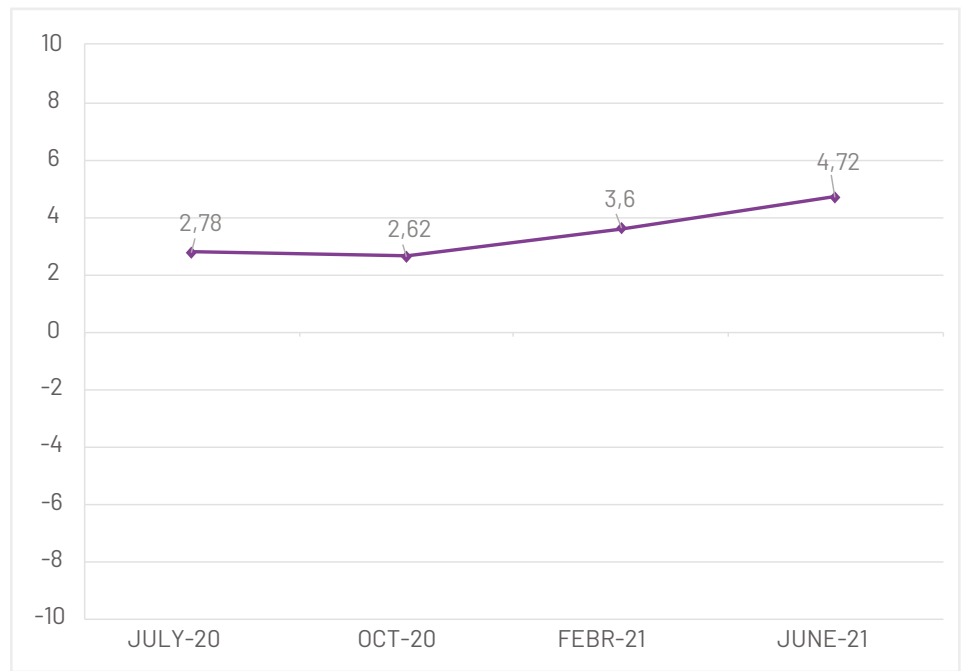


Figure 1. Optimism regarding the company development (July 2020, October 2020, February 2021 and June 2021)

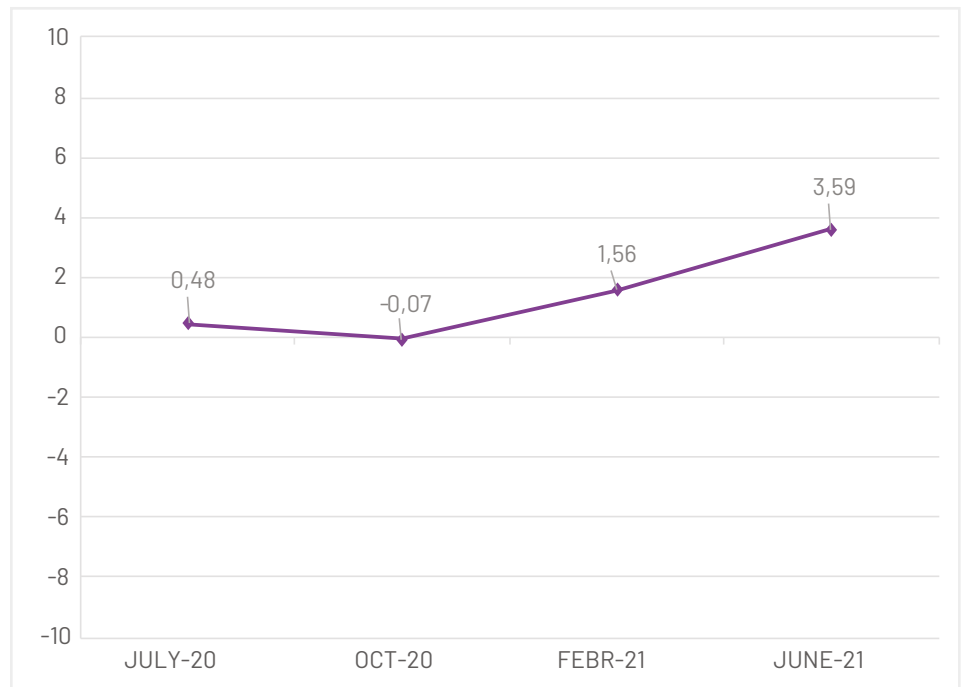


Figure 2. Optimism regarding the economic situation (July 2020, October 2020, February 2021 and June 2021)

The business environment in which the company operates is considered to be quite disrupted (median of 5) (scale of 0-no change to 10-complete and radical change) (see Figure 3). Faced with this change, entrepreneurs see it as more of an opportunity than a threat 57.2% of the time (57.1% in February and 49.7% in October).

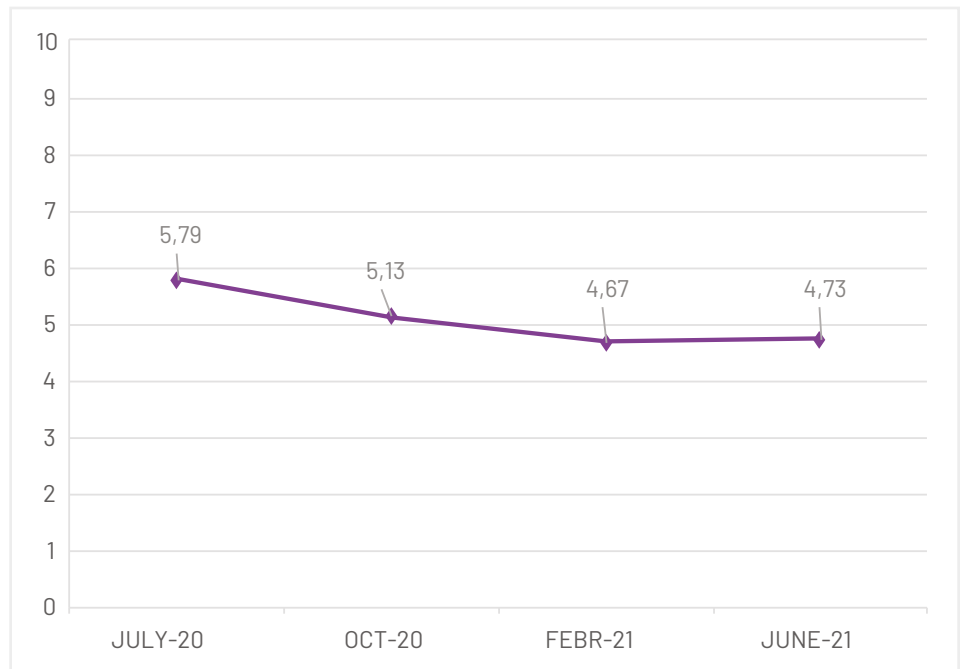


Figure 3. Level of change in the business environment (July 2020, October 2020, February 2021 and June 2021)

The level of customer change in June 2021 is 77.7%, which represents a decrease of 4.3 points compared to February (82%). At the same time, changes in offering new products or services affected 72.5% of the sample (80.5% in February) or sourcing from a new supplier for 58% (65.5% in February). The use of technologies for operations remained unchanged for 34.7% (19.9% in February) of cases. It would therefore seem that the upheavals caused by the pandemic fade after a year of follow-up. A new normal seems to be setting in.

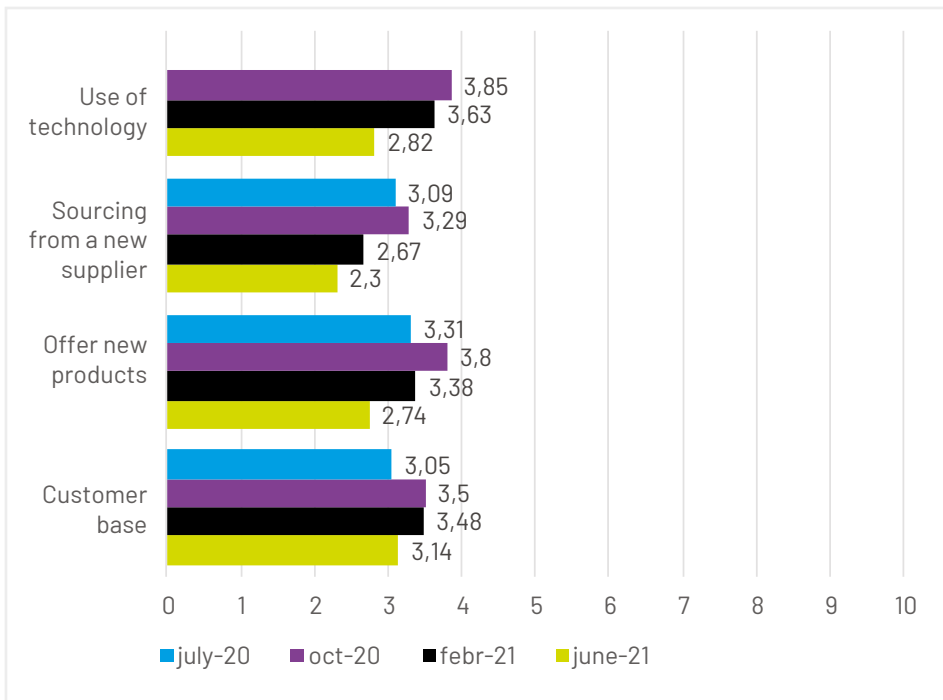


Figure 4. Change in customer base, product/service offering, suppliers, and technologies¹ (July 2020, October 2020, February 2021 and June 2021) (scale from 0-No changes to 10-Big and radical changes)

The situation of the companies in our sample shows more or less positive results compared to February 2021 in terms of increased sales, reduced layoffs, financial performance satisfaction, as well as the level of profitability perceived. Therefore, the changes caused by the pandemic seem to be gradually fading; a new normal, linked to less uncertainty seems to be setting in.

¹ Data for July 2020 is not collected.

Since February 2021, 76.7% (88.9% in February, 90.8% in October 2020, and 92.1% in July 2020) of companies have had to reorganize work. Also, a decrease in liquidity was observed among fewer entrepreneurs (36.8%) than in previous periods (44.8% in February, 47.6% in October, and 56.8% in July). This forced fewer entrepreneurs to take on more debt (35.2% versus 42.9% in February, 47.6% in October 2020, and 52.7% in July 2020) and 20.7% saw their debt decrease (27.2% in February and 25.8% in October 2020). The work organization and the financial health also seem to be less disrupted for this last period, in line with less upheavals caused by the pandemic. Figure 5 presents the average level of change in liquidity and indebtedness (measuring scale from -5-Big reduction to +5-Big increase).

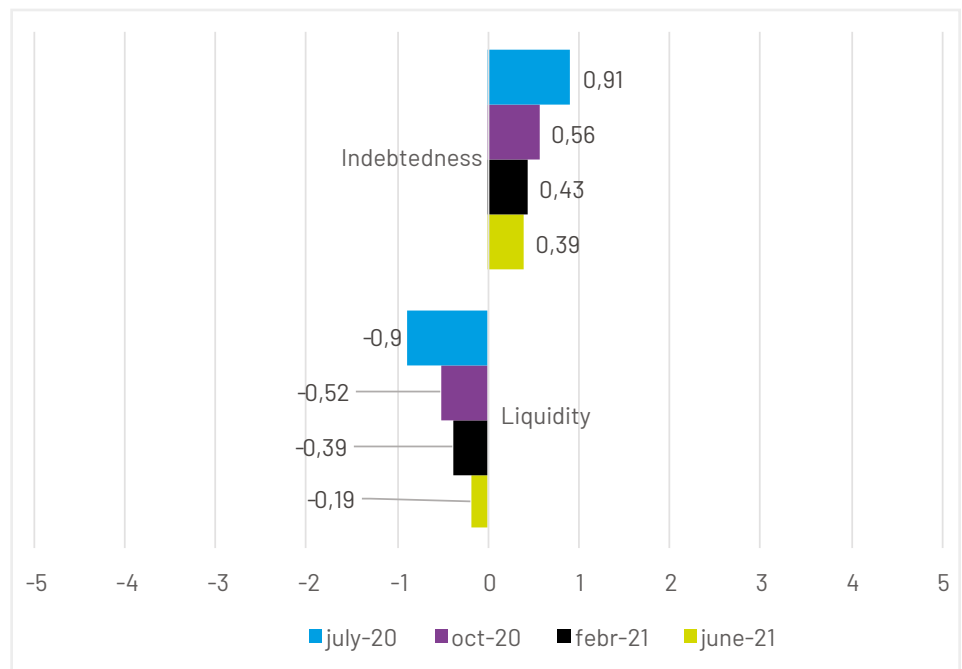


Figure 5. Change in level of liquidity and indebtedness (July 2020, October 2020, February 2021 and June 2021)

Financial debt and liquidity indicators suggest that the situation of the companies in the sample has overall improved since the start of the pandemic.

SUPPORT AND RESOURCES



To deal with the pandemic, the different levels of government have put in place support measures. We find that **since February 2021**, 49.2% (33.6% in February, 28.9% in October 2020) of those questioned have not used these measures, while only 45% (47.9% in February and 52.8% in October) benefited from some of them and only 5.8% (18.5% in February and 18.3% in October) benefited from several of them. For eligible entrepreneurs, these measures are always considered moderately sufficient (median: 6 out of 10) and moderately adapted (median: 6 out of 10). Thus, support declines over time, consistent with the idea that the turbulence caused by the pandemic is also declining.

Overall, entrepreneurs feel that they have easy enough and in sufficient quantity access to various resources to meet their obligations and projects. As shown in figure 1, the most accessible resource remains business contacts (5.15 out of 7), followed by useful and quality training (5.10 out of 7), quality consulting services (4.95 out of 7) and quality project feedback (4.64 out of 7). The least accessible resource is access to rich opportunities to exchange with other entrepreneurs (4.08 out of 7), sufficient financial support on adequate terms (4.17 out of 7), access to quality employees (4.44 out of 7) and quality emotional support (4.49 out of 7). In the context of a pandemic, these latter resources are particularly important for entrepreneurs, yet they are the ones that seem the least accessible.



Compared to last February, sufficient financial resources on adequate terms as well as access to rich opportunities to exchange with other entrepreneurs remain the resources considered the least accessible by them. Also, access to quality employees is at its lowest level since the arrival of the pandemic.

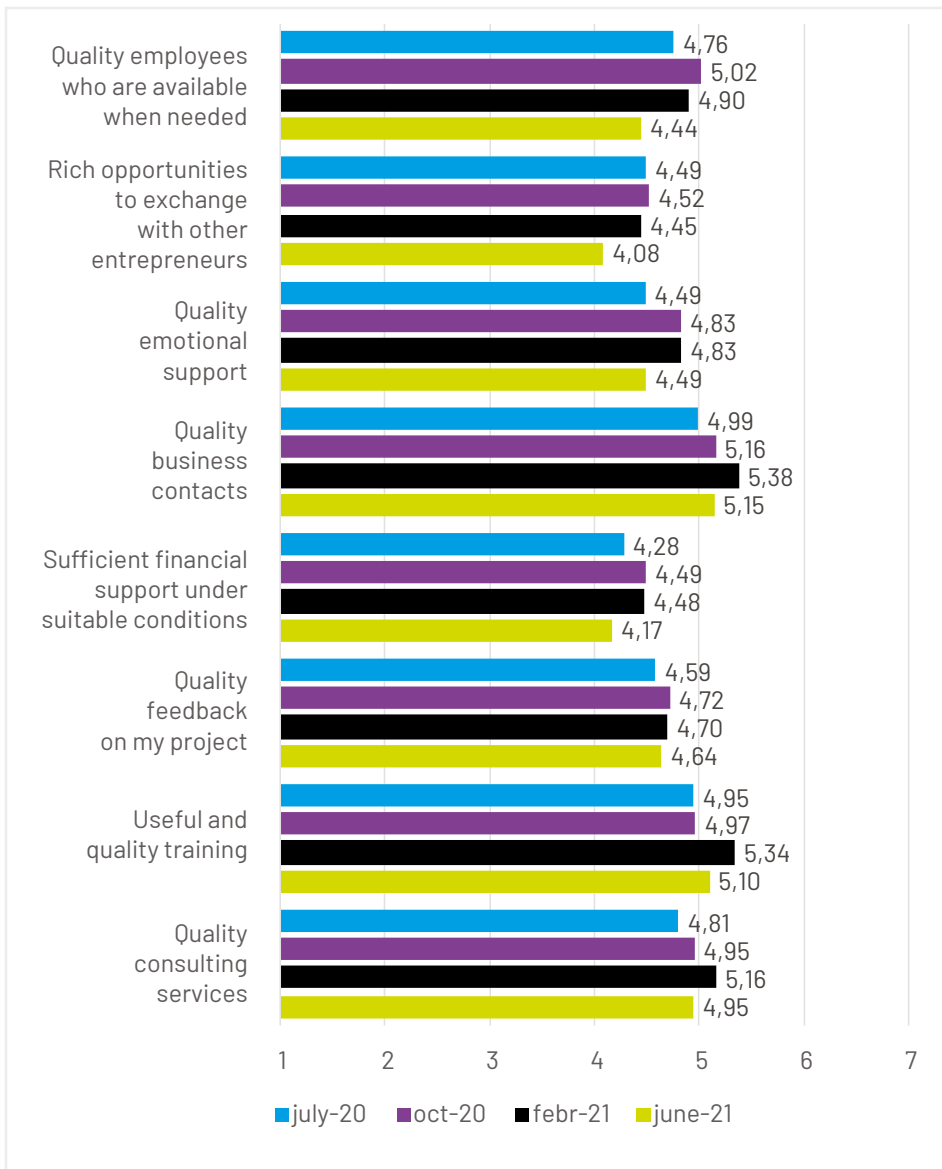


Figure 6. Access to resources for entrepreneurs (July 2020, October 2020, February 2021 and June 2021)

INNOVATION COLLABORATION



Innovating consists of developing new products or services, improving existing products/services, improving methods or processes, introducing new technologies or changing the organizational structure.

Between February 2021 and June 2021, half (50.3%) of entrepreneurs collaborated with other companies to innovate (versus 39.8% in February, 49.2% in October) and 80.6% (versus 81.7% in February and 70.3% in October)

believe that this level of collaboration has increased while only 5.1% (8.7% in February and 18.3% in October) noticed a decline in innovation collaboration. Companies can also collaborate for reasons other than to innovate.

Between February 2021 and June 2021, 46.1% of entrepreneurs (37.2% in February and 49.4% in October) collaborated with other companies for reasons other than to innovate. In companies that collaborated, 79.8%

(versus 81.4% in February and 61.9% in October) of entrepreneurs said the level of these collaborations increased while only 5.6% saw a decrease in collaboration with other companies (9.3% in February and 21.6% in October) and 14.6% state that the level of collaboration has remained the same (versus 9.3% in February and 16.5% in October). We therefore find that after a slight decrease in collaboration to innovate, it returns to higher levels.

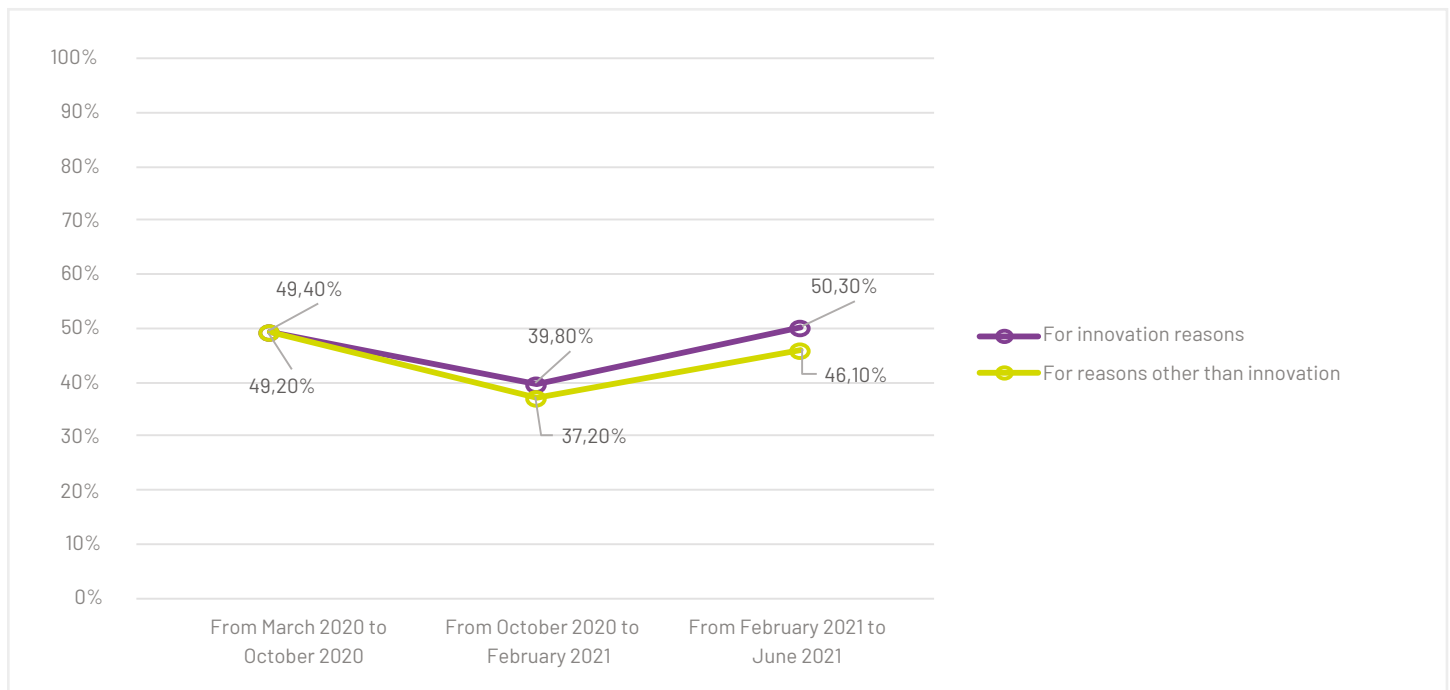


Figure 7. Percentage of entrepreneurs who collaborated for innovation or other reasons.

Coming out of the crisis, the level of collaboration between entrepreneurs to innovate and for other reasons has increased since last February.

CHALLENGES AND PSYCHOLOGICAL HEALTH



Here we present the main elements of psychological health management. Respondents were asked to specify if they were experiencing this challenge at the moment (scale of 1-Not at all to 5-Very much). Figure 2 presents the percentage of respondents who mentioned experiencing “4-Somewhat” and “5-A lot” for the different challenges. As we can see, the most important at the moment seems to be managing the balance between the different spheres of entrepreneurial life (40.5%), followed by having a good knowledge of oneself (35.8%), coping with the psychological burden of entrepreneurial life (35.3%), and

managing stress and psychological load (33.6%). Breaking the isolation felt as an entrepreneur ranks last, with only 25.4% of our sample having encountered this challenge.

We note that all the challenges relating to psychological health have decreased over time since the announcement of the pandemic.

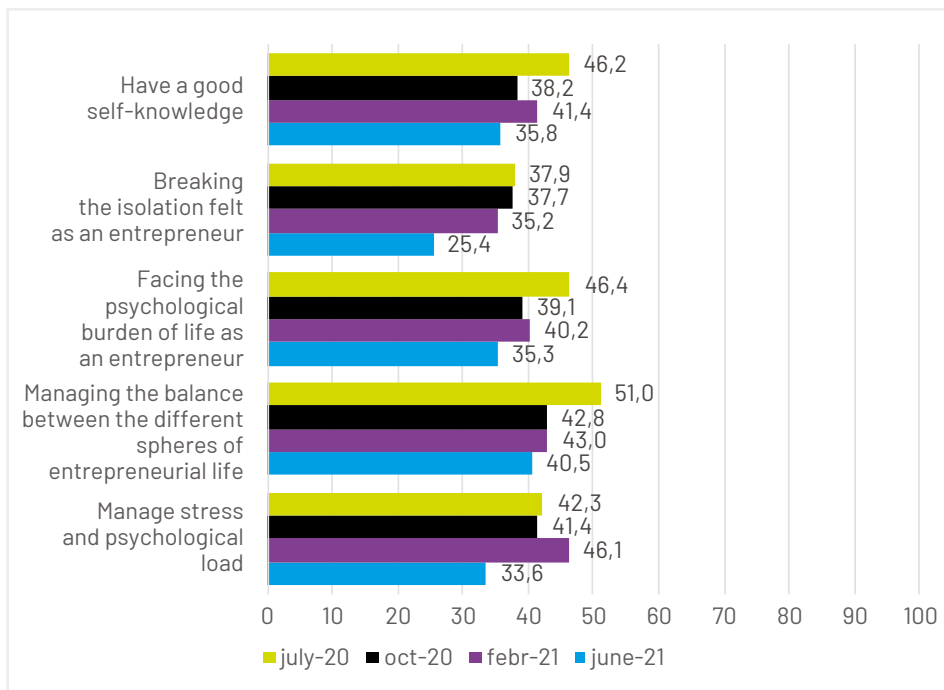


Figure 8. Challenges experienced related to psychological health management (July 2020, October 2020, February 2021 and June 2021)

We also used a burnout measure for the entrepreneurs in the sample. The average burnout score is 4.73 (out of 7) while for the previous sample taken at the start of the pandemic, entrepreneurs obtained a slightly higher average score of 4.95 in July 2020, a slightly lower score of 4.38 in October 2020 and a score of 4.36 in February 2021 (out of 7). Based on the relative burnout thresholds calculated on the current sample, there would be 29.54% of entrepreneurs who would be considered professionally exhausted in June 2021 compared to 32.03% in February, 30.24% in October 2020 and 32.62% in July 2020². Entrepreneurs exhausted in June 2021 are therefore slightly less numerous than at the start of the pandemic, but this decrease is all in all very slight.

The percentage of entrepreneurs who feel exhausted has decreased by 2.49 points in the last period (29.54% in June 2021 versus 32.03% in February 2021).

In terms of subjective well-being, the measure shows the frequency of well-being feeling (i.e., in a good mood, calm, vigorous, etc.) over the past two weeks. The scale ranges from 0–Never to 5–All the time. We find that the sample displays subjective well-being a bit at the top of the center of the scale (average score of 3.39), almost the same score as that recorded in February 2021 (average score of 3.40), which is a slight improvement compared to July 2020 (average score of 3.33), but a slight decline compared to October 2020 (average score of 3.50). In sum, the well-being of entrepreneurs varies relatively little, despite the ups and downs of the pandemic.



2 The calculation of the threshold is done by the $z\text{-score} = \text{Mean} + (\text{standard deviation} \times 0,5)$.

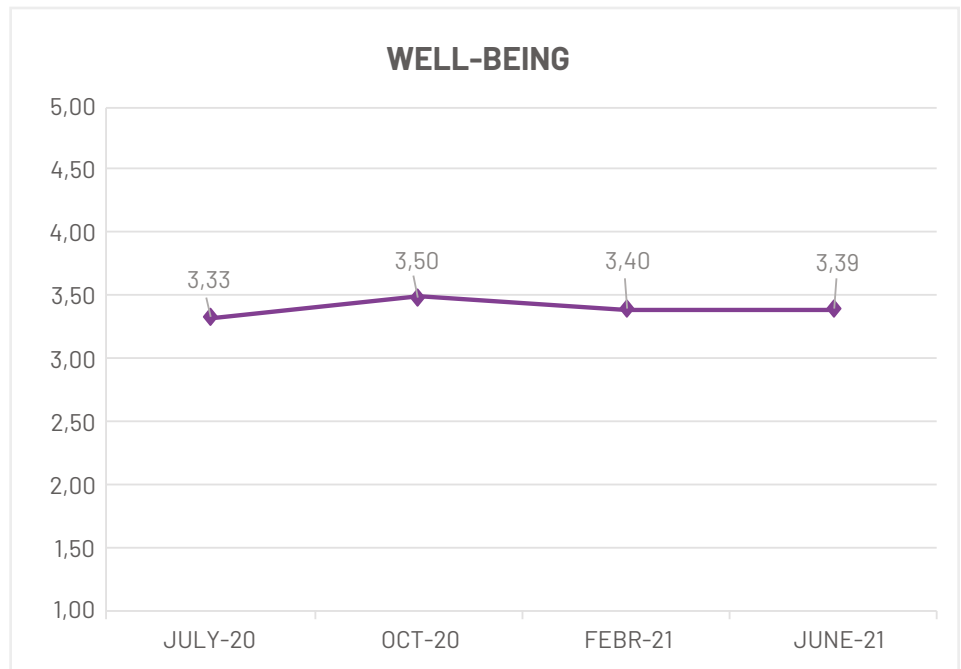


Figure 9. Evolution of the subjective well-being of entrepreneurs (5-degree scale) (July 2020, October 2020, February 2021 and June 2021)

Situations such as the COVID-19 pandemic are likely to generate stress. Only 27.5% of entrepreneurs are “quite often” or “often” stressed (average score of 2.98 out of 5). This rate is very slightly lower than the others observed since the start of the pandemic (3.17 in February, 3.11 in October and 3.03 in July).

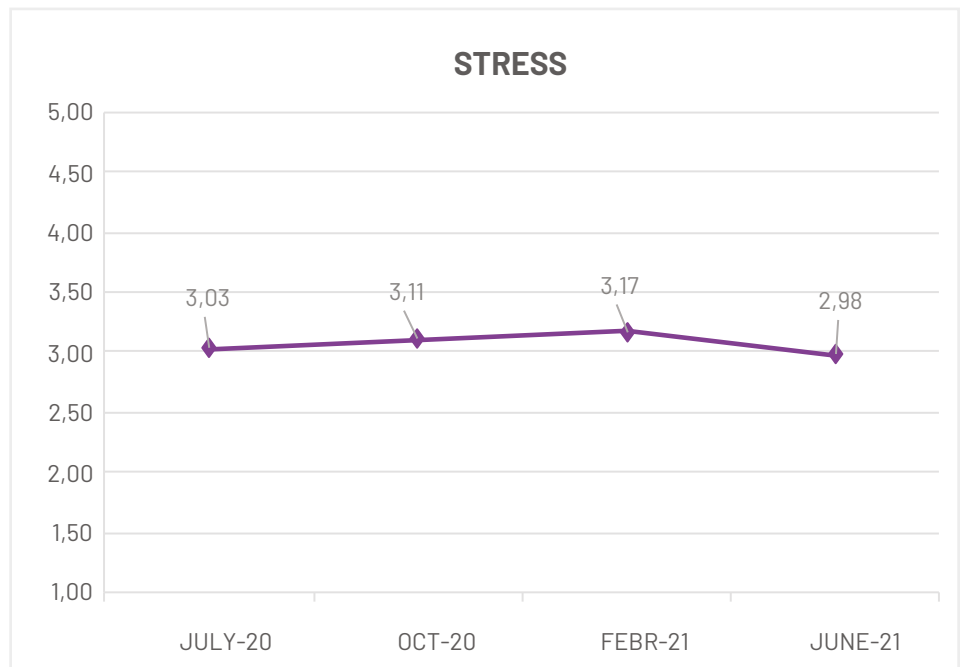


Figure 10. Evolution of the stress of entrepreneurs (5-degree scale) (July 2020, October 2020, February 2021 and June 2021)

The perception of sleep quality (measured using a scale ranging from -10-Really bad to +10-Really good) is at the top of the middle of the scale (average score of 1.12), with a very slight deterioration since February 2021 (average of 1.19), but an improvement since July 2020 (average of -0.01) and October 2020 (average of 0.78). The sleep quality has therefore experienced a slight increase since the announcement of the pandemic.

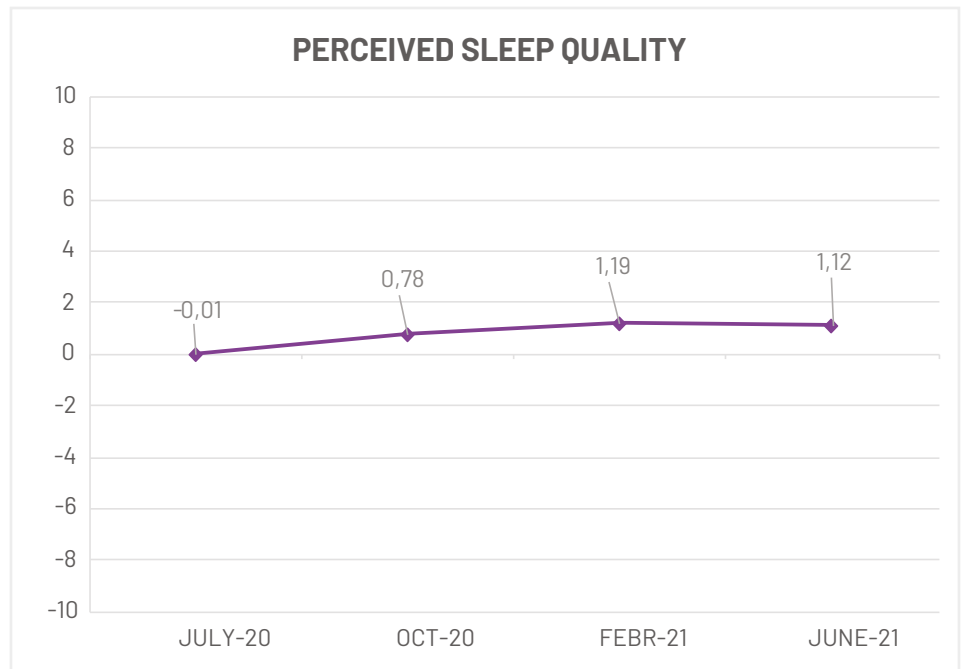


Figure 11. Evolution of the sleep quality of entrepreneurs (July 2020, October 2020, February 2021 and June 2021)

The rate of entrepreneurs who sometimes or often feel lonely (Average 1.72 out of 3) slightly decreased in June (56.2%) compared to February 2021 (60.8%) and to October 2020 (59.8%). Also, a total of 72.9% of the sample is somewhat or totally satisfied with being an entrepreneur (rate of 63.5% in February 2021, 62.3% in October 2020 and 56.9% in July 2020), which constitutes a significant improvement since the start of the pandemic.

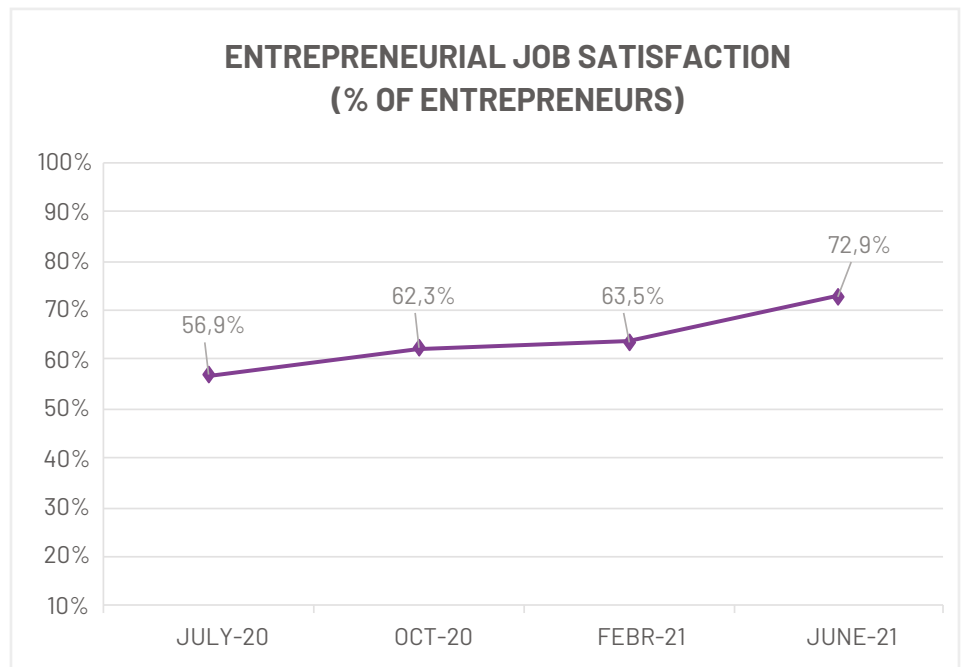


Figure 12. Evolution of entrepreneurs who feel somewhat or totally satisfied (July 2020, October 2020, February 2021 and June 2021)

When entrepreneurs are asked the probability of still being an entrepreneur in the next five years, 66.7% of the sample consider remaining an entrepreneur at a probability of at least 80%, which constitutes an important increase in resilience since February 2021 (64.3%), October 2020 (46.7%) and July 2020 (55.2%). Thus, after a trough in October 2020, the resilience of entrepreneurs is at its highest point in June 2021.

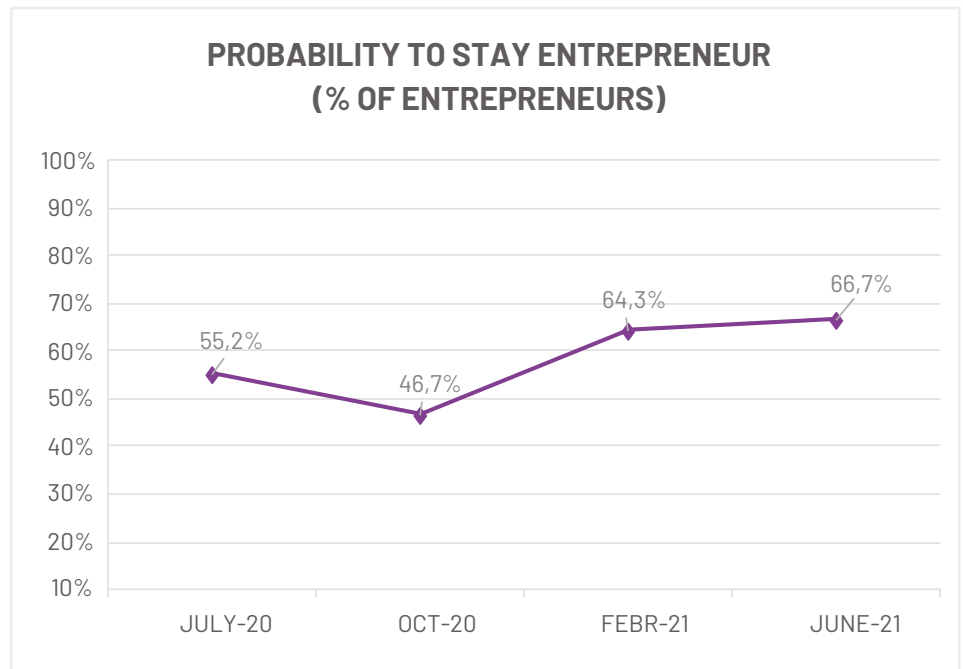


Figure 13. Evolution of entrepreneurs who state they want to remain an entrepreneur for the next five years with a probability of at least 80% (July 2020, October 2020, February 2021 and June 2021)

In this context of lull in the effects of the pandemic (June 2021), the satisfaction of being an entrepreneur and the probability of remaining an entrepreneur for the next five years have improved compared to previous periods. This illustrates that the situation is improving overall for them.

HOW TO MANAGE STRESS AND AVOID EXHAUSTION?



These preliminary results show that entrepreneurs, like people in general, use three main stress coping strategies: task-oriented strategies, emotion-oriented strategies, and avoidance-oriented strategies

We found that 39.0% of asked entrepreneurs oriented towards tasks often, or quite often (35.5% in February, 39.6% in October, and 40.4% in July), while 42.2% oriented towards emotions (41.9% in February, 37.8% in October, and 42.7% in July) and 46.3% were oriented towards positive avoidance (46.9% in February, 49.2% in October,

and 49.4% in July). As for taking alcohol, drugs or medication, almost 36.1% take them quite often or often compared to February when there was 34.3%, a situation almost identical to previous periods (October (36.04%) and July (35.62%)). Figure 14 presents the evolution of the average scores for stress coping strategies.

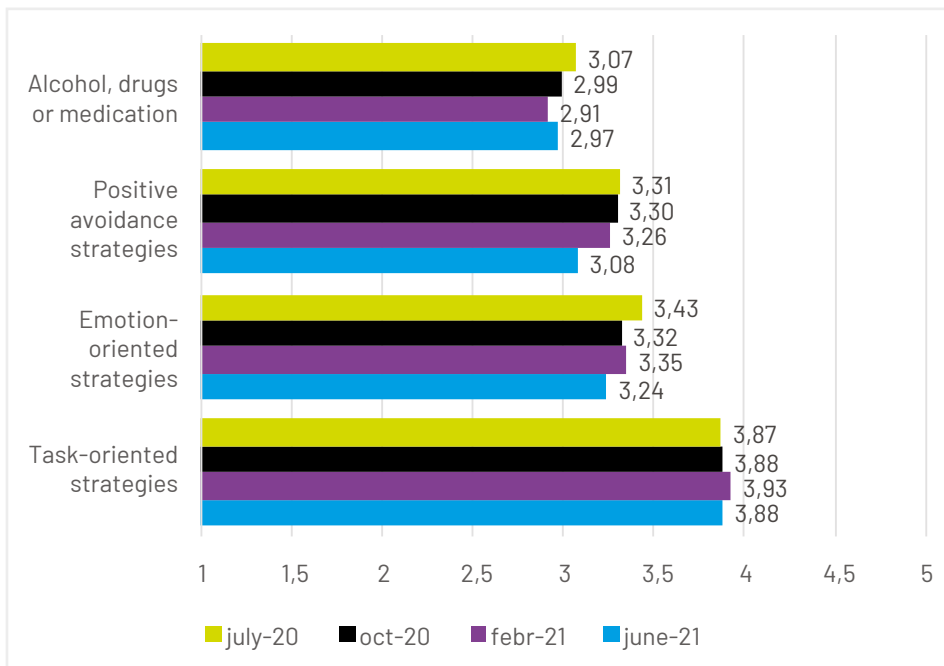


Figure 14. Stress coping strategies (July 2020, October 2020, February 2021 and June 2021)

In sum, coping strategies change relatively little over time.

RESEARCH WORK CARRIED OUT AND IN PROGRESS

This research project has led to accepted scientific publication and others in the review process and which will be published very soon. Here are some results obtained so far in connection with this research project.

In one of these publications (St-Jean and Tremblay, 2021), we first observed that eligibility for government support measures in our sample was contingent on several factors, including size (largest companies have more access to support measures), age (older people have more access) and being in the tourism and catering sector compared to the manufacturing sector (the latter having less access). Regarding the “sufficiency” of measures to support companies, they are not considered sufficient for entrepreneurs with an immigrant background and when the company is old. Interesting facts: Having access to “adapted” and “sufficient” government support measures is linked to a better quality of sleep and generates more well-being for the entrepreneur. Finally, a greater probability of remaining an entrepreneur in the next five years is associated to the “sufficiency” of government support measures.

In another current publication, we have noticed that the turbulence in the business environment in terms of employment in the different industries (layoffs and job creation) caused by the Covid-19 pandemic during the months following its arrival (March, April and May 2020) caused significant changes in the work organization. For example, we can think of temporary layoffs in the restaurant sector and subsequent hiring, in a context where restaurant seating configurations and customer reception procedures have been turned upside down. These changes generated stress for entrepreneurs, which in turn has affected their well-being.

Three categories of resources help reduce stress and maintain the well-being of entrepreneurs. First, resources directed to the organization, for example access to appropriate training, business advice as well as funding, reduce stress directly and reduce the impact of stress on well-being. In other words, stress will have less harmful effects on well-being if the entrepreneur has access to this type of resource. Then, “relational” resources such as having access to trusted people to talk to or being able to count on the support of their spouse. These resources reduce stress and improve well-being. Finally, individual resources related to the three main coping strategies. Task-oriented strategies (e.g. reviewing goals) as well as positive avoidance strategies (e.g. taking breaks and vacations, exercising or yoga, etc.) reduce stress and improve well-being. On the other hand, emotion-oriented strategies (e.g. procrastinate, daydreaming about better places, etc.) do not reduce stress and are detrimental to well-being. They are therefore to be avoided.

These findings provide guidance to entrepreneur support organizations to help them better support them. Moreover, the results allow entrepreneurs to realize that maintaining their physical and psychological health is fundamental to the success of their entrepreneurial career.



CONCLUSION

The Covid-19 pandemic has had both positive (opportunities) and negative effects on the management of SMEs over the months. This situation also had effects on indicators of the psychological health of business people. Some industrial sectors have been particularly affected, some were still at the turn of 2021, almost two years after its arrival.

The entrepreneurs in the sample showed, on average, a lot of resilience facing this pandemic.

The whole research team wishes to thank all the people who took part of this project by taking the time to complete the questionnaires at each of the follow-up waves. This information is important and allows us to better understand the role of career shocks and draw conclusions about the best strategies to support business people in these difficult situations

We wish them all the best in their current and future projects!

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REFERENCE

St-Jean, É. and M. Tremblay (2021), « Conséquences de la pandémie sur la santé psychologique de l'entrepreneur : les soutiens publics permettent-ils d'éviter le pire ? », *Revue Internationale PME*, vol. 34, n° 2, p. 81-99.

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