



COVID-19
Canada

THE END OF THE WORLD
AS WE KNOW IT?

RESEARCH REPORT N° 7

HOW ARE WE FEELING? TRACKING CANADIANS' NEGATIVE
EMOTIONAL EXPERIENCES DURING THE COVID-19
PANDEMIC

THIS RESEARCH REPORT IS INTENDED FOR
POLICY MAKERS AND THE GENERAL PUBLIC

THE PROJECT IS FINANCED BY THE CANADIAN
INSTITUTES OF HEALTH RESEARCH (CIHR)

Abstract

We asked a representative sample of Canadians about their negative emotional experiences from April to December 2020. When the first lockdown and restrictions were in effect, Canadians reported relatively high levels of negative emotions (5.45 on a 1-10 scale). We observed that negative emotions decreased over the summer months, and then increased again in the fall of 2020. This pattern may relate to increases and decreases in restrictions imposed by the government. Though this pattern during the pandemic was similar for all Canadians, we found that women, younger adults, parents, and visible minorities experienced even more negative emotions. These are the Canadians that would benefit from more support to help them cope with negative emotions during crises in the future.

Table 1. Definitions and measures of key concepts

Concepts	Definition/measurement
Negative emotions	During the past week, because of the COVID-19 crisis, I often felt... (1) Angry (2) Annoyed (3) Frustrated (4) Afraid (5) Nervous (6) Helpless (7) Sad (8) Bored (9) Lonely (10) Guilty (11) Worried 1 = <i>Strongly disagree</i> ; 10 = <i>Strongly agree</i>
Age groups	Age group to which the participant belongs: (1) 18-24 (2) 25-34 (3) 35-54 (4) 55-64 (5) 65 and older
Household composition	The participant lives: (1) Alone; (2) With children, with/without adults; (3) Without children, with adults
Ethnicity	Participant's self-reported ethnic group: (1) White; (2) Visible minority (Black, Asian, Latino/a, Indigenous, Other)

Research goals

COVID-19 has created a real crisis for many Canadians. The fear and anxiety of an unfamiliar and deadly virus, the unprecedented disruption of daily life combined with strict restrictions and health measures combined to generate a genuine concern over Canadians' well-being. The fear was that the prolonged crisis would lead to a significant decrease in the well-being of Canadians over time. We tracked Canadians' emotional experiences during the COVID-19 crisis (from April to December 2020), asking whether their experience with negative emotions changed over the course of the pandemic and whether these changes were felt differently for different groups of Canadians. **This report describes changes in experiences of negative emotion based on gender identity, age, household composition, and being a visible minority.**



Hypotheses and exploratory analyses

We expected:






1. High levels of negative emotions during the COVID-19 crisis, especially in times of lockdowns.
2. More negative emotions among women as compared to men. We based Hypothesis 2 on the well-documented average tendency of women to report more negative emotions than men (Harmatz et al., 2000) in normal times and on accumulating evidence that the COVID-19 crisis has a disproportionately negative impact on women.

We also explored changes in negative emotional experiences for different age groups household composition, and for members of visible minorities.

Method

Data were extracted from a large longitudinal survey of a representative Canadian sample ($N_{\text{wave1}} = 3617$, see Table 1 for details). Respondents to the survey completed an in-depth questionnaire on multiple occasions over a year. For more methodological details, please see the survey's technical report (de la Sablonnière et al., 2020) and the table 2.

Table 2. Methodological and demographic information

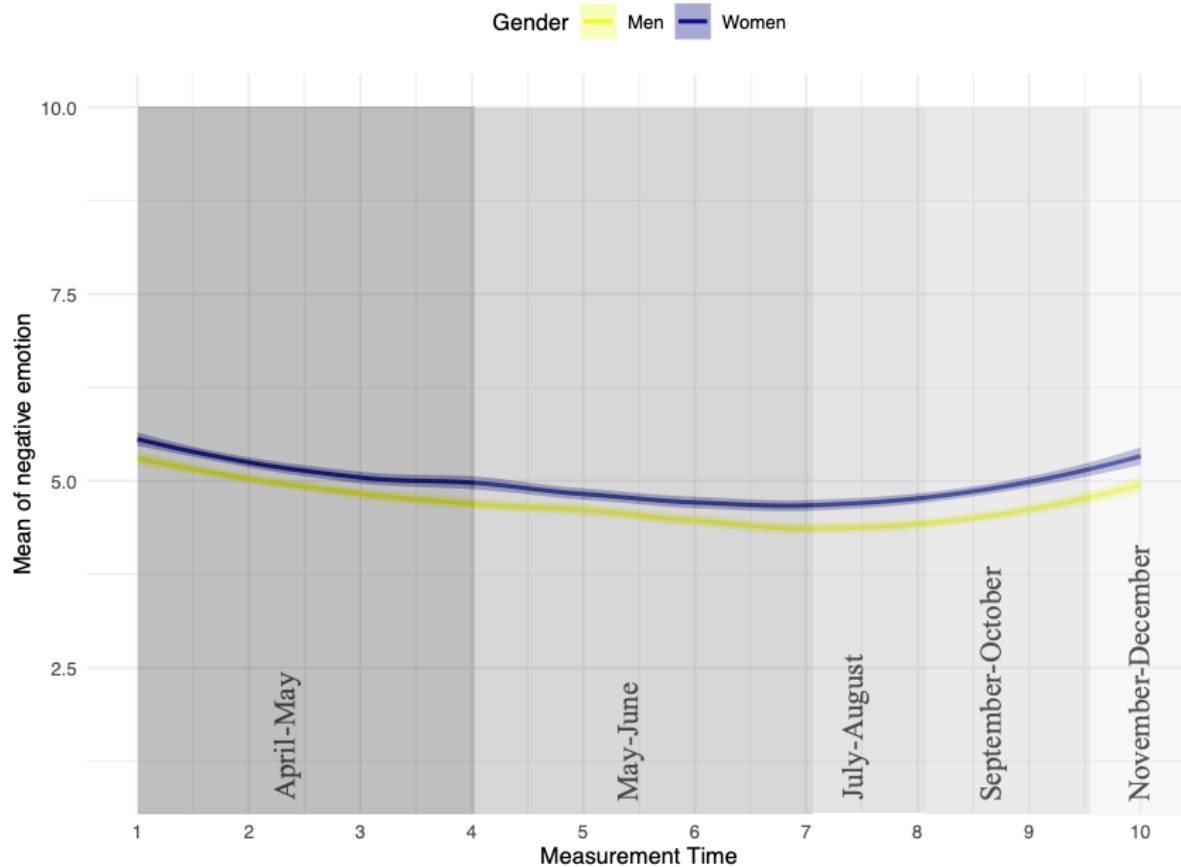
 Measurement time	 Sample Size	 % (n) Women	 Mean age (range)	 Survey Dates
1	3613	50.5% (1827)	47.63 (18-92)	6 April - 6 May 2020
2	2282	48.9% (1115)	49.03 (18-86)	21 Avril - 11 May 2020
3	2369	49.2% (1165)	48.81 (18-86)	4 May - 25 May 2020
4	2296	48.5% (1113)	48.90 (18-86)	18 May - 10 June 2020
5	2154	48.7% (1048)	49.32 (18-92)	1 June - 23 June 2020
6	2116	48.8 % (1033)	49.36 (18-92)	15 June - 13 July 2020
7	2072	49.1 % (1017)	49.80 (18-92)	13 July - 8 August 2020
8	1871	49.4 % (924)	50.42 (18-92)	17 August - 13 September 2020
9	1821	48.4 % (882)	51.82 (18-92)	21 September - 19 October 2020
10	1883	49.4% (867)	51.30 (18-92)	25 November - 28 December 2020

Findings

Hypothesis 1 was partly supported. Canadians' emotional experience was overall negative during the COVID-19 crisis. While research on emotions generally find people report relatively low levels of negative emotions (usually in the lowest quarter of the scale), the respondents to our COVID-19 survey rated their emotions substantially higher, close to the scale's midpoint (5, see Figures 1 - 4). Importantly, there was no continuous rise in negative emotions. In fact, negative emotions fluctuated over time: Canadians' negative emotions decreased from the high point in April 2020, at the onset of the pandemic ($M_{wave1} = 4.45$, $SD_{wave1} = 1.95$), towards the summer months ($M_{wave6} = 3.39$, $SD_{wave6} = 2.14$). Negative emotions were on the rise again in the fall of 2020 ($M_{wave10} = 4.17$, $SD_{wave10} = 2.13$), as the number of positive COVID-19 cases across Canada increased (Public Health Agency of Canada, November, 20, 2020) and the government re-introduced restrictions (CBC News, November 23, 2020). At the same time, this pattern should be interpreted with caution. Less negative emotions during the summer months and more negative emotions during the winter months have been documented before the pandemic (Harmatz et al., 2000). However, because the increase in negative emotions was strongest during the fall, it is likely that the pandemic contributed to negative emotional experiences, above and beyond seasonal effects.

Hypothesis 2 was supported. As figure 1 shows, women reported more negative emotional experiences compared to men during the entire period of the study. This finding is in line with previous research showing that women report more negative emotions as compared to men.

Figure 1. Change in negative emotions of women and men.



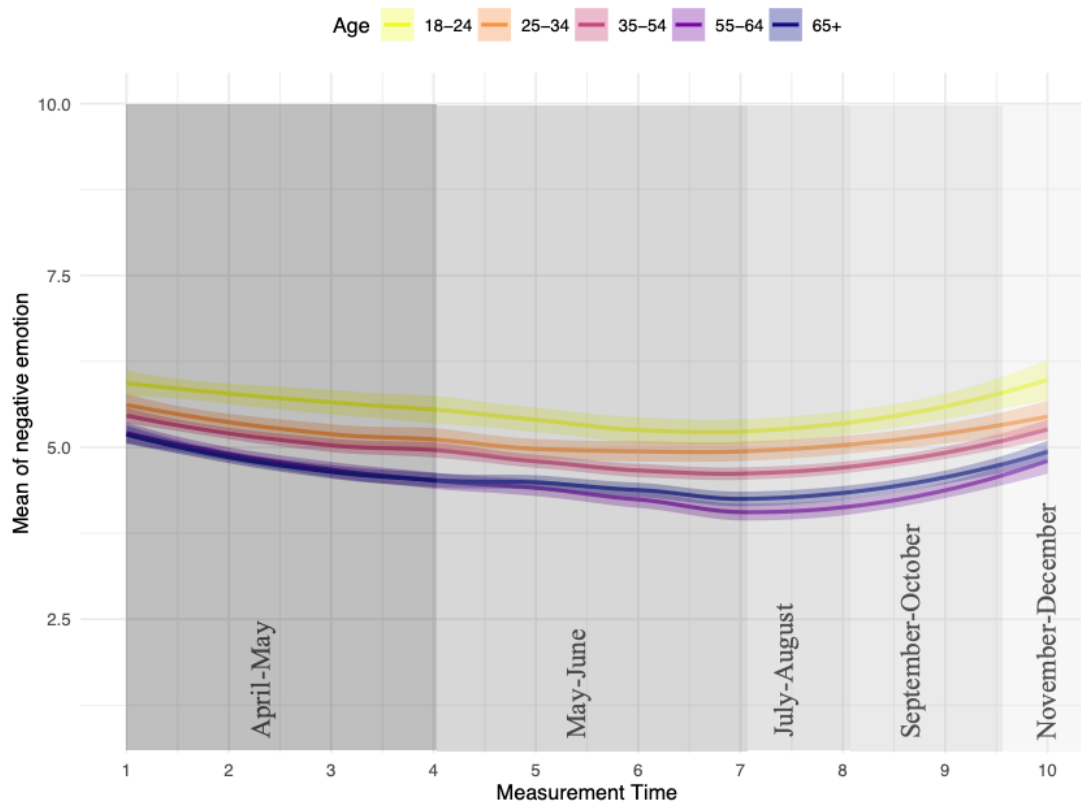
Note. The thickness of the curves represents their uncertainty.



Exploratory analyses of other demographics

- **Age:** As Figure 2 shows, young adults (18-24) experienced more negative emotions as compared to all other age groups. Respondents over the age of 55 experienced negative emotions less than other age groups. These differences were similar for women and men. The negative emotional experience of younger adults could be due to the fact that their life experiences are more limited as compared to older adults, making it harder to compare the current COVID-19 crisis to previous real-life difficulties. It is also possible that the disruptions caused by the pandemic (e.g., lockdown and physical distancing) were subjectively more challenging for younger adults because they were no longer able to participate in their usual daily activities or lost their jobs (for example in the hospitality industry).

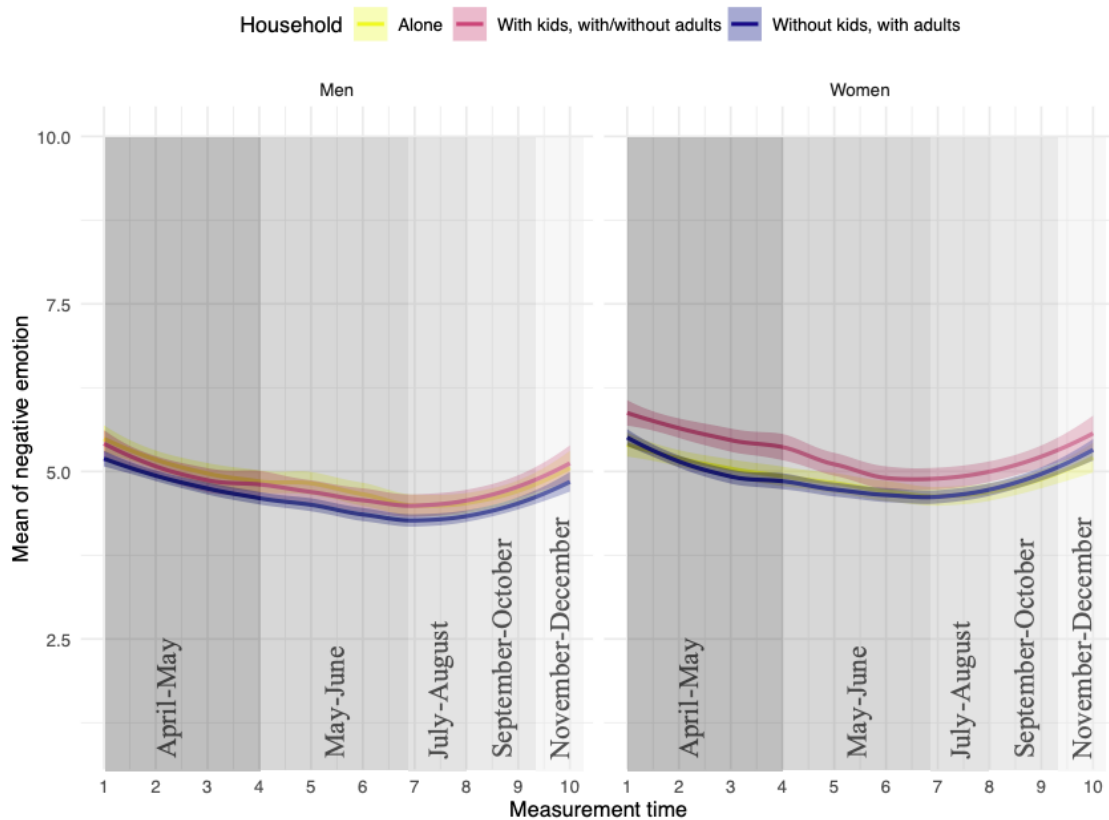
Figure 2. Change in negative emotions of different age groups.



Note. The thickness of the curves represents their uncertainty.

- Household composition:** As Figure 3 shows, women living with children struggled the most. Compared to women and men who live alone, women living with children experienced more negative emotions. Men and women living without children (but with other adults) experienced slightly negative emotions less as compared to those living alone. These differences were more pronounced for women. This is not surprising, given that many parents had to work while supporting their young children especially during daycare and school closures, and women carried most of the burden of childcare. It is noteworthy that although prolonged lockdowns and physical distancing are extremely challenging to those who live alone, the emotional experience of mothers was especially negative during this time.

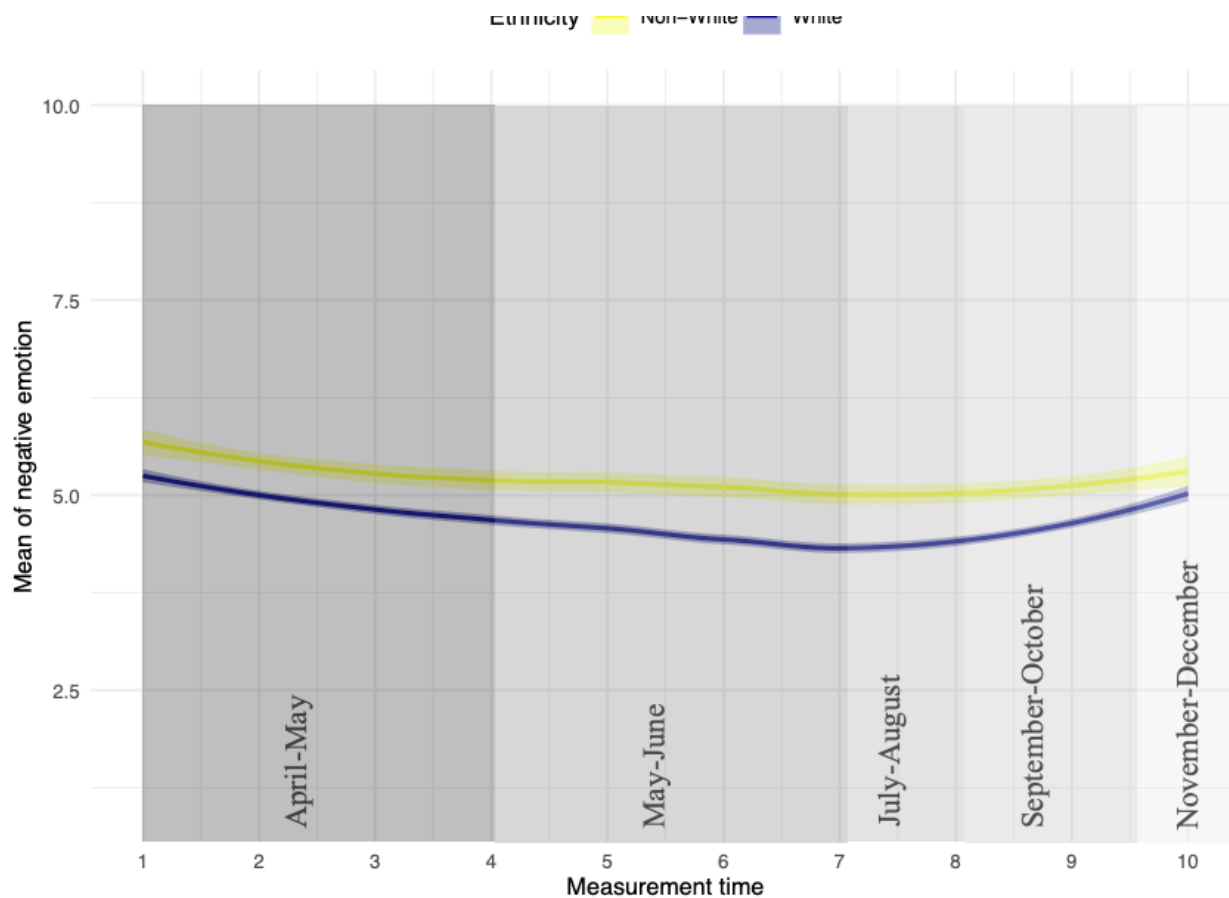
Figure 3. Change in negative emotions of different age groups.



Note. The thickness of the curves represents their uncertainty.

- Ethnicity:** As Figure 4 shows, non-white Canadians experienced more negative emotions as compared to white Canadians for the entire duration of April to December 2020. We also observed that among white Canadians, negative emotions subsided during the summer months more as compared to visible minorities. It is important to note that we obtained information on ethnic group membership only for a subsample of the respondents (n = 2445) and that most of the sample was White (78%, n = 1902). Because the visible minority groups in the survey were small, these differences should be interpreted with caution.

Figure 4. Change in negative emotions of Whites and Visible minorities (Non-Whites)



Note. The thickness of the curves represents their uncertainty.



Recommendations

As this report shows, Canadians experienced moderate-high levels of negative emotions during the pandemic. Though we do not have a comparable prepandemic measure from our responders, negative emotions reported in other surveys and studies conducted before the COVID-19 pandemic tend to be below the midpoint of the scale (Nelson et al., 2014; Nolen-Hoeksema & Rusting, 1999) whereas they are above the mid-point in our study. It is noteworthy that we do not observe a growth in negative emotions over time. Rather, emotional experiences were most negative at the beginning of the pandemic (April-May 2020), improved during the summer, and declined again in the fall and winter (September and December 2020). Importantly, certain groups of Canadians – women and especially women with children, young adults, and ethnic minorities – were feeling worse than others. These Canadians would benefit from **targeted support** when considering interventions to improve well-being and mental health could be beneficial. We also believe that conducting research that focuses on under-represented groups in our sample, such as Indigenous people and Black Canadians is critical, as our data cannot provide a reliable picture of their emotional experiences during the COVID-19 crisis due to a small number of respondents from these groups.

To cite this report

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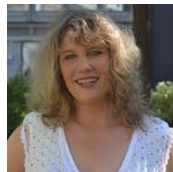
Jean-Marc is the founder and director of the PhysNum laboratory, as well as a researcher at the Center for Advanced Research in Sleep Medicine of the Hôpital du Sacré-Cœur. He studies the dynamics of complex systems including rhythms in social psychology.



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