Social Media and COVID-19: A Mixed-Methods Analysis to Document Canadian Adults' Perceptions of the Positive and Negative Sides of Their Social Media Use

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Abstract

Using a mixed-methods approach, the purpose of this study was to document some Canadian adults' social media experiences during the COVID-19 pandemic to understand potential changes in motives and attitudes related to social media. Participants (n = 68; 17 - 66 years old) completed an online survey with open-ended and Likert-scale questions between April 25 and June 12, 2020. Qualitative responses were coded and analyzed for themes related to the positive and negative aspects of social media use and changes in attitudes. Descriptive statistics, ANOVAs, and t-tests were run to assess perceived changes in frequency and motivations driving social media use, in addition to the perceived utility of social media. Participants perceived increases in their social media use, particularly to meet socialization and entertainment needs. During the pandemic, participants valued social media for its opportunity to maintain connections, but also expressed concerns about how much they were using it and their exposure to negative information. The results suggest that maximizing the potential of social media to maintain or increase connections may be beneficial for the well-being of some Canadians in early and middle adulthood during unprecedented times of physical distancing.

Keywords

1. Introduction

Social media refers to a group of Internet and mobile-based applications used to

communicate with others through the creation, receipt, and sharing of text, images, and videos (Aichner et al., 2021). There are multiple different social media including social networking sites, instant messaging, chat rooms, blogs, and online virtual games. According to the uses and gratifications theory (Katz et al., 1973), people actively select and use media or technology in the hope of having some needs gratified. The fulfillment derived from the activity will prompt the media's continued use. A prominent theme in social media and motives literature is that individuals intentionally select and use social media platforms to fulfill three needs: socialization, information seeking, and entertainment (Bae, 2018; Ferris & Hollenbaugh, 2018; Whiting & Williams, 2013), especially among younger adults (Kircaburun et al., 2020). Before the pandemic, individuals have commonly turned to social media when socialization needs could not be met offline (Bowden-Green et al., 2020; O'day & Heimberg, 2021), shown a shift away from traditional sources toward social media to acquire information (Gangadharbatla et al., 2014; Shearer, 2018; Techentin et al., 2022), and relied on social media when they have idle time, when bored and want something to do, or for humor and comic relief (Wang, 2019; Whiting & Williams, 2013).

Social media use for these purposes has been associated with both benefits and pitfalls for mental health. When used for stimulating social connections, social media helps to attenuate loneliness (Yang, 2016), enhance the quality of friendships (Desjarlais & Joseph, 2017), broaden their social network (Verduyn et al., 2017), and receive social support (Lu & Hampton, 2017). The downfall of sharing information online to make these connections is that it can put users at risk for cyberbullying (Aizenkot, 2020). Along the same vein, browsing is associated with its own perks and challenges. Social media use in general and in the context of information seeking can be a fun and entertaining experience (Asghar, 2015; Wang, 2019). Engaging in enjoyable activities is advantageous for happiness and well-being (Haworth, 2016). Alternatively, mindless browsing can be responsible for increased depressive symptoms and less positive well-being, which are attributable to negative social comparison (Verduyn et al., 2017), information overload (Fu et al., 2020), or problematic use that interferes with other aspects of life (Vernon et al., 2017).

During segments of the COVID-19 pandemic, the world was faced with a unique situation. Individuals found themselves physically distanced from their social networks with more idle time. When COVID-19 was declared a pandemic on March 11, 2020, by the World Health Organization, Canada attempted to curb the spread of the virus by imposing social distancing orders. This included the prohibition of public gatherings in excess of a small group of individuals, the requirement to physically distance when meeting in-person (i.e., maintain a minimum of 2 meters distance apart), closure of all non-essential businesses, an education and work from home order, and mandatory self-isolation for those returning from travel or exhibiting COVID-19 symptoms (Lawson et al., 2022). The rules for social distancing, although ever evolving, extended from weeks in-

to several months. The provincial governments slowly began lifting restrictions in the latter part of May 2020. Social, information, and entertainment needs would be particularly salient when individuals were suddenly faced with social distancing requirements, uncertainty, and more free time during the initial phase of the pandemic. Since people were well-versed in using social media for these reasons prior to the pandemic, it is plausible that they would turn to social media during a time of crisis. The first objective of the current study was to explore the uses and gratifications theory in the context of COVID-19. Using a mixed-methods approach, the current study documented 1) perceptions of how some adults' social media use changed, in terms of motives and duration, in response to imposed regulations during the initial stages of the pandemic in Canada, and 2) the strengths and drawbacks some adults experienced while using social media during the initial stages of the pandemic.

1.1. Research on Social Media Use during COVID-19

Since the current study's completion in June 2020, reports have explored pandemic-induced social media usage. In response to the loneliness and anxiety associated with the lockdown, social media was recommended as a way people could attenuate feelings of disconnection and stress (APA, 2020; Bazarova, 2020). Whether individuals followed this advice or turned to social media on their own initiative, multiple studies cited increases in social media use during the pandemic relative to pre-pandemic frequencies (Bilodeau et al., 2021; Boursier et al., 2020; Ellis et al., 2020; Pandya & Lodha, 2021). Of particular interest, individuals consistently mentioned turning to social media to stay connected with one another (Boursier et al., 2020; Rosen et al., 2022), fill up spare time (Al-Dwaikat et al., 2020), and seek information (Allington et al., 2021; Muñiz-Velázquez et al., 2021) as reasons underpinning their social media use. Although it can be inferred from the findings that (some) adults were more motivated to use social media amid the pandemic compared to the timeframe prior, research that directly compares motives is needed to support these conclusions. The current study will fill this gap in the social media and COVID-19 literature by documenting some of the perceived changes in the driving factors of social media use in response to the pandemic among a group of Canadian adults.

While there is little disagreement that social media usage increased in response to the COVID-19 pandemic, the literature is mixed regarding individuals' experiences associated with their social media use. In terms of connection, loneliness was both relieved and exacerbated by using social media. In some studies, heavier social media use was associated with enhanced social support and decreased loneliness (Latikka et al., 2022; Rosen et al., 2022). When individuals used social media specifically for social support, they experienced more positive mental health (Gilmour et al., 2020). Other research reported that social media use was linked to less positive well-being (Geirdal et al., 2021; Lee et al., 2022), lower levels of happiness (Muñiz-Velázquez et al., 2021), and increased feelings

of loneliness (Rumas et al., 2021; Schoultz et al., 2021). Some individuals even felt exhausted from spending too much time online to stay connected with others (Schoultz et al., 2021). Similarly, entertainment use of social networking sites was found to be associated with psychological distress symptoms (Al-Dwaikat et al., 2020). Whereas another study found that using social media to watch and share funny videos was positively related to feelings of happiness (Cauberghe et al., 2021). Last, social media has played a pivotal role in disseminating information, making it easy for people to stay informed about the pandemic, their social networks, and their communities (Rosen et al., 2022; Schoultz et al., 2021). This also means, however, that people had access to an extraordinary amount of information, that which could be factual, contradictory, or false. The sustained exposure to the volume of (mis)information and conversations about COVID-19 online induced anxiety (Muñiz-Velázquez et al., 2021) and overwhelmed users (Fu et al., 2020; Islam et al., 2020). Information overload was often linked with anger, frustration, and fear (Schoultz et al., 2021). Because the prevalent themes listed above coincided with the pre-pandemic social media literature, the current study still focused on perceived changes in three needs: socialization, information, and entertainment in response to the social distancing requirements of the pandemic.

1.2. Purpose of the Current Study

During the planning phase for the current study (March 2020), there was no research into adults' social media use in response to physical distancing requirements in Canada. Three years later, however, multiple empirical studies cite social media experiences that took place around the world during the initial stages of the pandemic (e.g., Boursier et al., 2020; Ellis et al., 2020; Muñiz-Velázquez et al., 2021; Rosen et al., 2022; Schoultz et al., 2021). From the relevant literature, three themes are apparent: 1) social media use increased in many countries around the world, 2) social media was intentionally selected to fulfill socialization, information, and entertainment needs, and 3) social media use was associated with both positive and negative outcomes. But there is still a limited understanding of the extent to which social media motives have increased and how perceived positive and negative social media experiences changed attitudes toward social media use moving forward. Using a mixed-methods approach, the current study was designed to understand the lived experience of social media use during the initial stages of the COVID-19 pandemic in Canada among some adults and was guided by the following research questions:

1) Do adults perceive their social media use as being driven more by certain motivations when (compared to before the outset of) the physical distancing orders were imposed in Canada?

2) What do adults identify as the positive and negative aspects of their social media experiences during the initial phases of the COVID-19 pandemic when physical distancing orders were imposed in Canada?

3) In what ways has their pandemic-based social media use changed their perceptions of or attitudes towards social media?

2. Materials and Methods

2.1. Study Design and Setting

This study was part of an online survey about social media use during the pandemic. The cross-sectional survey (administered in Google Forms) was made available between April 25 and June 12, 2020. Invitations to take part in the survey were placed on social media (Facebook and Instagram), community pages on platforms designed for Canadians to exchange goods and services (Kijiji Canada), and a university research participation website. The online platforms were chosen as they are free to join, have an abundance of members, and commonly accessed by a diverse population across Canada. Participants in the study were of age of majority from the general population and a convenience sample of undergraduate students enrolled in an online introductory psychology course at the researcher's institution.

The participants fulfilled the inclusion criteria: 1) Canadian resident currently residing in Canada, 2) English-speaking, and 3) be the age of majority which is considered 18-years-old with in the general population or 17-years-old, based on ethics protocols at the author's institution, among students from the author's institution. Any respondent who did not meet the criteria was not given access to the consent form and survey. Consent was obtained by completing the first page of the survey. The current study obtained approval from the Human Research Ethics Board of the corresponding author's institution.

2.2. Questionnaire

For this project, the online survey consisted of open-ended and closed-ended questions designed to collect social media metrics, demographic variables, as well as perceptions of the utility, positives, and negatives of social media during the pandemic, and changes in their attitudes toward social media.

2.2.1. Social Media Metrics

To examine perceived change in social media use, participants were asked to report retrospectively on their social media use in the past week (i.e., during the pandemic) and then on their use before the implementation of social distancing requirements (due to COVID-19). In effect, participants responded twice to each of the following questions—once for each context. To assess the duration of use, participants were asked to report how much time they spent on each prescribed social media application on a typical day. The list of social media platforms included text/voice messaging apps (e.g., WhatsApp, Viber, Messenger), Instagram, Snapchat, Facebook, YouTube, Twitter, TikTok, and discussion websites (e.g., Reddit). Responses were coded as 0 = *not at all*, 0.5 = *up to 30 min*, 1 = *31 - 60 min*, 2 = *1 - 2 hours*, 3 = *2 - 3 hours*, 4 = *3 - 4 hours*, 5 = *4 - 5 hours*, 6 = *5 - 6 hours*, and 7 = *more than 6 hours*. Using the same list of social media platforms,

participants also selected which applications they accessed several times a day.

2.2.2. Motivations Underpinning Social Media Use

The 19-item scale from Sung et al. (2016) was used to assess four motives for using social media, including attention-seeking (6-items; e.g., to attract attention), communication (5-items; e.g., to keep in touch with friends), archiving (5-items; to record a specific moment), and entertainment (3-items; to be entertained when I'm bored). For each item, participants selected a response on a scale of −3 (strongly disagree) to 3 (strongly agree), with a midpoint of 0 representing neither agree/disagree. Items within each component were averaged (Cronbach's α ranged from 0.71 to 0.93).

2.2.3. Perceptions of Social Media Use

In relation to individuals' perceptions of their social media experiences during the pandemic, open-ended responses were collected prior to responses to closed-ended questions. Participants were asked the following open-ended questions: 1) What do you consider to be positive about your social media use during the COVID-19 pandemic? 2) What do you consider to be negative about your social media use during the COVID-19 pandemic? 3) In comparison to your views before COVID-19, have your perceptions of or attitudes toward social media changed? If so, how?

For the closed-ended questions, participants were asked to identify on a scale of 0 (not at all) to 4 (extremely) how useful they felt social media had been in the following contexts: maintaining social connections, providing entertainment, passing the time, seeking information, reducing loneliness, providing others with emotional support, receiving emotional support, archiving experiences or storing memories, and coping with stress. Using a 7-point Likert scale (−3 = *an extreme amount in a negative way* to 3 = *an extreme amount in a positive way*, with a midpoint value of 0 = *not at all*), participants reported to what degree their social media use affected the following areas of their life: quantity of sleep, feel about self, feelings of belonging, self-presentation, quality of relationships, stress/anxiety, and jealousy of others.

2.2.4. Demographic Variables

To describe the sample characteristics, participants were asked to self-report their age, ethnicity, and the number of hours worked in the past week. From provided options, participants also identified their gender (female, male or other), level of education (options ranging from some high school to completed graduate post-secondary education), relationship status (married, cohabiting, or in a committed relationship—yes/no and dependent status (dependents under the age of 18—yes/no).

2.2.5. Qualitative Analysis

For each of the three open-ended questions, all qualitative responses were pooled together and analyzed using a thematic analysis approach (Braun et al.,

2006). Two researchers first read the data twice in order to get familiarized with the responses. Together, a list of initial codes to describe responses was generated. Subthemes and main themes were then extracted and named. Multiple codes could be assigned to a single participant's response and any discrepancies were discussed until an agreement was reached.

3. Results

3.1. Participants

A total of 68 Canadian adults completed the survey. The survey was accessed by the university participant pool website (n = 19) and social media posts (n = 49) with 85% of the sample completing the survey between April 25 and May 30, 2020. The mean age of the participants is 31.15 years (SD = 11.28). Most participants were female, between the age of 18 and 34, in a committed relationship, and without dependents (see Table 1). Participants worked between 0 and 80 hours the previous week (M = 19.52, SD = 21.59).

3.2. Social Media Metrics

The platforms accessed multiple times a day during the pandemic were consistent with those accessed before the pandemic. Specifically, Facebook (before: 83.8%, during: 86.8%), text/voice messaging apps (before: 85.3%, during: 80.9%), and Instagram (before: 66.2%, during: 66.2%) were consistently visited most regularly. Although less participants accessed the following platforms, more participants indicated using the platform regularly during compared to before the pandemic: Snapchat (before: 36.8%, during: 42.6%), YouTube (before: 39.7%, during: 57.4%), Twitter (before: 11.8%, during: 14.7%), TikTok (before: 16.2%, during: 19.1%), and discussion websites (before: 7.4%, during: 11.8%). Overall, 37 respondents accessed the same number of platforms regularly, whereas 7 cited a decrease and 24 cited an increase following the outset of the pandemic.

To capture perceived changes in the frequency of social media usage before compared to during the pandemic, a paired-samples t-test was conducted for each social media platform. The mean frequency of use did significantly increase across all social media platforms, apart from discussion websites (see Table 2). The difference between pre-pandemic and pandemic-concurrent use was calculated for the popular platforms, and participants' use was classified as increasing, decreasing or unvarying; frequencies for each category were calculated (see Table 3).

3.3. Motivations Underpinning Social Media Use

To explore changes in motives underpinning social media use as a function of the pandemic, a 2 (timing: pre-pandemic vs. pandemic-concurrent) × 4 (motive: attention seeking, communication, archiving, vs. entertainment) repeated-measures ANOVA was conducted. The two-way interaction was statistically significant, $F(3, 201) = 108.77$, $p < 0.001$, $\eta_p^2 = 0.113$. On average, individuals exhibited

Table 1. Participant demographics.

Characteristic	n (%)
Gender	
Female	55 (80.9)
Male	13 (19.1)
Age Category	
Early adulthood (18 - 34)	48 (70.6)
Early middle age (35 - 44)	12 (17.7)
Late Middle age (45 - 66)	8 (11.7)
Education	
High school	10 (14.7)
Incomplete post-secondary education (Bachelor's degree, diploma, or certificate)	19 (27.9)
Completion of post-secondary (Bachelor's degree, diploma, or certificate)	12 (17.6)
Incomplete Master's degree	9 (13.2)
Master's/Doctoral degree	18 (26.5)
Married, cohabiting, or committed relationship	
yes	42 (61.8)
no	26 (38.2)
Dependents under the age of 18	
yes	16 (23.5)
no	52 (76.5)
Ethnicity	
Asian	5 (7.4)
Bengali	1 (1.5)
Black	4 (5.9)
Brazilia	1 (1.5)
Canadian	8 (11.8)
East Indian	4 (5.9)
Filipino	1 (1.5)
Sikh	1 (1.5)
White	42 (61.8)
No response	1 (1.5)

Note. $N = 68$.

increases in communication and entertainment motives for their social media use during the initial phases of the pandemic compared to pre-pandemic ($p's <$ 0.001). There was no change in attention-seeking ($p = 0.576$) and archiving motives ($p = 0.059$). Although individuals' social media use was typically motivated by communication followed by entertainment, these motives became even more pronounced during the pandemic (see Table 4).

Table 2. Average frequency of social media use preceding and amid the COVID-19 pandemic by platform.

Platform	Preceding	Pandemic	t-test		
	M (SD)	M (SD)	t	df	d
Text/voice messaging	1.38 (1.41)	1.95 (1.73)	3.59***	66	1.28
Instagram	1.32 (1.61)	1.88 (2.10)	3.51***	67	1.31
Snapchat	0.66 (1.25)	0.99 (1.67)	3.09**	66	0.85
Facebook	1.44 (1.47)	2.10 (1.94)	3.89***	67	1.40
YouTube	1.12 (1.61)	1.79 (2.03)	3.82***	66	1.41
Twitter	0.13 (0.28)	0.23 (0.55)	2.35*	66	0.36
TikTok	0.26 (0.68)	0.62 (1.41)	3.10**	67	0.94
Discussion platform	0.27 (0.94)	0.31 (0.97)	1.30	67	0.23
Cummulative[1]	6.64 (4.97)	10.05 (6.01)	5.87***	64	4.68

[1]Reflects the summed use across all listed platforms. *$p < 0.05$. **$p < 0.01$. ***$p < 0.001$.

Table 3. Frequency (percentage) of adults in each use classification by platform and age category.

Platform	Adulthood Stage		
Use Classification	Early	Early Middle	Late Middle
Text/voice messaging			
Increased	25 (52.1)	2 (16.7)	4 (50.0)
Unwavering	16 (33.3)	9 (75.0)	3 (37.5)
Decreased	7 (14.6)	1 (8.3)	0 (0)
Instagram			
Increased	21 (43.8)	2 (16.7)	2 (25.0)
Unwavering	20 (41.7)	10 (83.3)	6 (75.0)
Decreased	7 (14.6)	0 (0)	0 (0)
Facebook			
Increased	23 (47.9)	4 (33.3)	3 (37.5)
Unwavering	21 (43.8)	7 (58.3)	4 (50.0)
Decreased	4 (8.3)	1 (8.3)	1 (12.5)
Snapchat			
Increased	14 (29.2)	0 (0)	1 (12.5)
Unwavering	31 (64.6)	12 (100)	7 (87.5)
Decreased	2 (4.2)	0 (0)	0 (0)
YouTube			
Increased	25 (52.1)	2 (16.7)	4 (50.0)
Unwavering	18 (37.5)	7 (58.3)	4 (50.0)
Decreased	4 (8.3)	3 (25.0)	0 (0)

Note. Early adulthood spans 18- to 34-years-old ($n = 48$), Early middle adulthood spans 35- to 44-years-old ($n = 12$), and late middle adulthood spans 44- to 66-years old ($n = 8$). The total percentage of adults for each age category and social media platform sum to 100%.

Table 4. Motives for social media use preceding and amid the COVID-19 pandemic.

Motive	Preceding	Pandemic
	M (SD)	M (SD)
Attention-seeking	-1.59_a (1.49)	-1.53_a (1.36)
Communication	1.44_b (1.34)	1.91_c (1.15)
Entertainment	0.84_d (1.51)	1.36_e (1.33)
Archiving	0.08_f (1.64)	-0.16_f (1.66)

Note. Motives were measured on a scale from −3 (*strongly disagree*) to 3 (*strongly agree*). Means with different subscripts (within rows and columns) differ the $p = 0.05$ level by simple main effects test.

3.4. Perceptions of Social Media Use

3.4.1. Qualitative Results

Open-ended responses were considered to determine the variation in perceptions of social media use as well as potential changes in attitudes toward social media because of their experiences. Several themes were identified related to the perceived positives and negatives of social media use during the pandemic (see Table 5 and Table 6, respectively, for detailed analyses of these themes). As expected, prominent themes included connection, pandemic relief, concerns with use, source of information, and negative thoughts.

Despite the opportunities and obstacles social media provided, 35 individuals indicated that their perceptions of or attitudes toward social media did not change because of their use during the pandemic. Of these, a subgroup of participants ($n = 7$) acknowledged an increase in their social media usage because of the pandemic. On the other hand, some participants described a greater regard for social media ($n = 9$) or expressed that their experiences during the pandemic led to a depreciation for social media and other users ($n = 10$). Specifically, social media was valued more in general ($n = 2$), for its ability to help maintain connections ($n = 6$), and for the way in which it can be used to spread positivity ($n = 1$) and normalize experiences ($n = 1$). Alternatively, some adults now view social media use as an unhealthy obsession ($n = 1$), toxic to mental health ($n = 2$), or less interesting ($n = 1$). Because of how others behaved online, their social media experiences were becoming more unpleasant ($n = 5$) and there was a need to be critical of what one is exposed to on social media ($n = 1$). Still others observed that social media was associated with both advantages and pitfalls ($n = 3$). Examples of the responses are as follows:

More appreciative: "*I have actually changed my perception of social media as a more positive thing. I have seen so social media used in such an amazing way to spread love and positivity as well as to stay connected*".

Less appreciative: "*My perception has changed—I find that it has a more negative effect now. It leaves me feeling desperate for contact from people I'm not hearing from and that is demoralizing.*"

Both positive and negative: "*I still feel that there are positives in how social*

Table 5. Frequency of recurring themes regarding the positive aspects of social media use amid the pandemic.

Theme Sub-theme	N	EA	EM	LM	Example Quote
Connection					
General connection with others	19	14	2	3	"I am using social media more to connect with others and have a sense of community rather than 'show off' or post about myself."
Maintain connection and communication with family and friends	20	16	3	1	"Being connected with friends and family while in quarantine and social distancing."
Reconnect	3	2	1	0	"I have reconnected with a small group of old friends. It is nice to feel like we are truly all in this together."
Check-in on loved ones	3	0	0	3	"Let's me see how my family and friends are doing."
Pandemic relief					
Distract oneself	2	2	0	0	"A distraction to the hard times occurring now."
Entertainment, relieve boredom or pass the time	7	2	4	1	"Something to kill time with…"
Helps to normalize experiences	3	2	1	0	"Technology and social media helped normalize the pandemic to some extent."
Information					
Media to stay informed	6	4	0	2	"It helps keep me informed."
Source for news and current events	8	4	4	0	"…it has allowed me to keep up with the news and update me regarding the virus. Social media sites like instagram and twitter have provided important information about the virus..."
Source for others' perspectives	2	1	0	1	"Gaining insights into other perspectives than my own."
Share information	2	0	1	1	"Passing on helpful resources and messages to a cohort who might otherwise miss them."
Source for positive information or comic relief	7	6	1	0	"I can see heart warming and funny posts in these dark days."
Exposure to others' creativity	2	2	0	0	"Seeing people embrace their creativity."
No change in routine	3	2	1	0	

Note. N = total number of mentions; EA = early adulthood, 18 - 34 (*n* = 48); EM = early middle adulthood, 35-44 (*n* = 12); LM = late middle adulthood, 44 - 66 (*n* = 8).

media allows us to stay connected to each other. I think we used social media to be connected even when we had the option of seeing each other face to face. Now that I can not connect physically with others, it makes me appreciate social media but also recognize that there is something missing in my relationships when I can't see someone face to face. I think it makes me realize how much I took for granted being able to see others. I also think that political views are overwhelming social media platforms and social media has become full of misinformation which led to more anxiety and Uncertainty regarding covid."

Finally, nine participants commented about a recent change in their own behavior when using social media or changes for their social media use in the future.

Table 6. Frequency of recurring themes regarding the negative aspects of social media use amid the pandemic.

Theme Sub-theme	N	EA	EM	LM	Example Quote
Concerns with use					
Potential for being addicted to social media	2	1	1	0	"I believe that I have gotten a lot more addicted to social medias, such as instagram and snapchat. This will make it harder for me to study once the pandemic is over, because it will be harder to focus and easier to get distracted."
Time on social media interferes with other aspects of life	8	3	5	0	"Spend too much time mindlessly browsing Facebook, get in a rut doing that when I should be working or interacting with my family."
Too much time on social media	23	20	2	1	"Spending too much time on it."
Exposure to information					
Too much negativity	17	8	3	6	"Posts have become more negative and sad."
General abundance of information	5	4	1	0	"Information overload."
Misinformation or fake news	6	5	0	1	"People are quite misinformed and judgmental when posting about COVID."
Negative thoughts					
Source of bad mood	4	4	0	0	"News media or watching other people be upset can impact my mood negatively."
Judgment	1	1	0	0	"Judging others for posting on social distancing behaviours."
Negative social comparison	4	4	0	0	"Viewing posts of young people in small work-out outfits, in peak physical condition, post workout/body affirmation information, while sitting at home, snacking, browsing social media, this feels terrible."

Note. Three young adults did not respond to the question. N = total number of mentions; EA = early adulthood, 18 - 34 (n = 48); EM = early middle adulthood, 35 - 44 (n = 12); LM = late middle adulthood, 44 - 66 (n = 8).

This included taking a break or reducing social media use, trying to have more meaningful conversations when using social media, posting more entertaining content, turning to social media to cope and connect, and being mindful of what one posts and follows.

3.4.2. Quantitative Results

Table 7 provides descriptive statistics for ratings of the perceived utility of social media. Participants found social media moderately useful for maintaining connections, entertainment, and passing the time. Whereas social media was conceived as somewhat useful for providing and receiving support, archiving information, reducing loneliness, and seeking information. It was less than somewhat useful for coping with stress. Based on a one-way repeated-measures Analysis of Variance (ANOVA), these differences were statistically significant, $F(8, 528) = 20.15$, $p < 0.001$, $\eta_p^2 = 0.234$.

To examine the extent that individuals perceived their social media use affected various areas of their life during the pandemic, the means for each item were compared to a value of zero which represents no effect at all. Table 8 presents

Table 7. Perceptions of social media's utility amid the pandemic.

Utility	*M*	*SD*	*Mdn*
Maintaining social connections	3.46[a]	0.87	4
Providing entertainment	3.28[a]	1.02	4
Passing the time	3.18[a]	1.00	4
Seeking information	2.74[b]	1.14	3
Reducing loneliness	2.62[b]	1.20	3
Providing others with emotional support	2.59[b]	1.03	3
Receiving emotional support	2.24[c]	1.19	2
Archiving experiences or storing memories	2.13[c]	1.46	2
Coping with stress	1.97[c]	1.32	2

Note. Means with different subscripts differ the $p = 0.05$ level by Bonferroni post hoc tests.

Table 8. The perceived extent to which social media affected specific areas of life.

Area of Life	*M*	*SD*	Single-sample t-test[1]
Quantity of sleep	−0.74	0.89	$t(67) = -6.80, p < 0.001$
Feelings about oneself	0.18	1.08	$t(67) = 1.35, p = 0.18$
Feelings of belonging	0.62	1.17	$t(67) = 4.35, p < 0.001$
Self-presentation	0.07	0.98	$t(67) = 0.62, p = 0.54$
Quality of relationships	0.60	1.17	$t(67) = 4.24, p < 0.001$
Stress or anxiety	−0.35	1.26	$t(67) = -2.32, p = 0.02$
Jealousy of others	−0.29	0.98	$t(67) = -2.48, p = 0.02$

Note. Measured on a scale from −3 (*extremely, in a negative way*) to 3 (*extremely, in a positive way*). [1]Mean ratings were compared to a value of zero representing no effect at all.

the descriptive statistics and results of the single sample t-tests. In sum, participants indicated their social media use has had a slightly negative effect on their sleep, level stress/anxiety and jealousy of others, while at the same time having a slightly positive effect on feelings of belonging and quality of relationships.

4. Discussion

The primary aim of this study was to document Canadian adults' perceptions of their social media experiences during the initial phases of the COVID-19 pandemic. Akin to research described in the introduction (Boursier et al., 2020; Ellis et al., 2020), the current study observed a (perceived) increase in social media use during the initial phases of the pandemic. On average, adults reported a slight increase to between 30 and 60 minutes of daily use for a variety of popular social media platforms, including messaging, Instagram, Snapchat, Facebook, and YouTube, resulting in an average increase of 3 hours per day. This increase

was most prevalent for the younger adults. Almost half of those in early adulthood reported some increase in their use of text/voice messaging apps, Instagram, Facebook, and YouTube. In contrast, most individuals in early and late middle adulthood reported relatively no changes in their use of these platforms.

For some participants, the increase in their social media usage during the pandemic was considered substantial enough for them that they noted it within their qualitative responses. A subgroup of young adults even expressed concern for how much time they were spending online and a need to take a break from social media following the pandemic. This is in line with other research that has reported a need for a "social media detox" among young adults following the pandemic (Liu et al., 2021). Moreover, a large proportion of adults in middle adulthood (25 - 34 years old) expressed recognition for their social media use interfering with other aspects of their life. Although such commentary may elicit concern for social media addiction, the flipside is that unsolicited expressions of increased use portray a level of awareness among social media use that can safeguard against problematic use following the pandemic. Research on the rates of social media addiction pre- to post-pandemic is required to investigate if social media use during the pandemic has transformed into a heightened number of people experiencing problematic use and thus a need for additional supports.

4.1. Motives and Gratifications Associated with Social Media Use

Activating one's social network (primarily) remotely appears to have been a double-edged sword. On the one hand, social relationships are core elements in people's lives and their subjective well-being (Cacioppo & Patrick, 2008). Both the quantity and quality of social interactions are associated with greater well-being (Sun et al., 2020). Moreover, a reduction in physical contact with others is also known to cause boredom which can cause distress (Brooks et al., 2020), for which social media has been a viable source of entertainment (Al-Dwaikat et al., 2020). For adults in the current study, they were leveraging social media to meet socialization and entertainment needs during social distancing requirements. Although their social media use was previously driven by communication and entertainment needs, these motives became more salient during the pandemic. Across all age groups, connection (in general or with family and friends in particular) was the most prevalent theme when expressing what they perceived as positive in relation to their social media use. The qualitative responses were further supported by the quantitative data. Participants in all age categories found social media moderately useful for maintaining connections, entertainment, and passing the time. Using social media for such reasons appeared to have been successful. On average, participants indicated that their social media use had a slightly positive effect on feelings of belonging and quality of relationships. Social media was also perceived as useful, albeit to a lesser extent, for providing and receiving support as well as reducing loneliness. Interestingly, it seems that adults in late middle adulthood may have benefited most from social media for

providing social support, as using social media to check in on others to see how they were doing was only mentioned by those in this age category. This concern for others likely reflects the care-related roles/responsibilities common among individuals during midlife (Evandrou et al., 2002). Overall, in line with (Rosen et al., 2022), these results suggest that social media is perceived to be a critical tool for social interaction during times of crisis.

The data has similar implications for entertainment and social media use. Evident through the quantitative data, individuals typically turned to social media as a tool to alleviate boredom and pass the time. Among the two younger age categories, a small proportion of adults found social media helpful for distracting oneself, providing entertainment and passing the time, and a source for positive information and comic relief. Although the survey did not directly assess how individuals used social media or what platforms they visited to meet their need for entertainment specifically, the increase in the number of people who regularly used YouTube suggests that (at least some) users were watching more videos. This is in line with previous studies that report individuals will turn to social media to watch videos to fill their time both prior to (Whiting & Williams, 2013) and during the pandemic (Cauberghe et al., 2021).

The findings suggest that for some adults their time spent online was relatively harmless to their well-being. Mentions of social comparison and anxiety, which are common concerns of social media browsing (Verduyn et al., 2017), were rarely recorded in the current study. Also, on average, participants indicated their social media use only had a slightly negative effect on their sleep, level stress/anxiety and jealousy of others. Researchers have indicated that the reasons behind a person's social media use can influence their own well-being (Kross et al., 2021; Quinn, 2016). As connection was the driving factor of social media use for many adults in the current study, their corresponding use could have acted as a sort of protective factor against negative outcomes typically associated with social media use. Alternatively, focusing on social media for connections could have overshadowed negative experiences, biasing participants' perspectives of their social media experiences during times of crisis. In either case, the data suggest that navigating social media with connection in mind may contribute to more positive outcomes.

Further, the data is indicative of a love-hate relationship with social media regarding access to information. Social media was perceived as somewhat useful for seeking information for the average user. However, few participants mentioned their ability to stay informed and current as a positive aspect of social media. It was more common for participants to express dissatisfaction and frustration surrounding the negativity, abundance of information, misinformation, and fake news they were exposed to on social media. This pattern was observed across all age groups. The COVID-19 pandemic provided a unique context in which everyone from around the world shared something in common. Considering the salience of COVID-19 and the ease for which users can generate and

share information on social media, the dominance of COVID-19-related information on social media is not surprising. During the pandemic, people were exposed to an abundance of statistics, advice, and humor related to the current situation (Mertens et al., 2020). Studies focusing on exposure to COVID-19 information indicate that excessive engagement with social media during the lockdown can result in social media fatigue and an intention to discontinue its use (Liu et al., 2021). In effect, participants may have been involved in a tug-of-war situation where they are put off by the content they were exposed to when browsing social media but at the same time feel a need to continue using it to maintain connections with one's social network during a time of isolation.

Although social media usage increased during the initial stages of the pandemic in Canada, most adults seemed to interact with social media in similar ways as before the pandemic. It comes of no surprise then that most respondents indicated their pandemic-related social media use had little to no impact on their attitudes toward and perceptions of social media. Of the small group who were more appreciative of social media, most highlighted its affordance for maintaining social connections. Others, however, expressed an increased disinterest in using social media because of the unpleasantness of what others were posting. Six of these 10 respondents made mention of the type of information posted when describing what they found to be negative about their social media use during the pandemic. Considering that 28 individuals in total referenced the content when considering the negative aspects of social media, there is a need to further understand differential responses to homogenous social media experiences. It would be interesting to determine why certain individuals were more affected by their exposure to particular (negative) information than others.

4.2. Strengths and Limitations

The results of the current study should be considered in light of some limitations. First, the data was collected during initial stages of the pandemic when there was promise of lockdown measures relaxing. As the survey took place within the first couple of months of Canada's response to the pandemic, it is possible that more serious negative effects associated with social isolation and quarantine (e.g., depression, anxiety, and loneliness) was not prevalent among those in the sample. Thus, social media may have been able to fulfill short-term disruptions to one's social life, but it is unclear if social media could have been able to compensate for more long-term interruptions for socialization and social support. Second, the sample consisted primarily of young adult females. Younger individuals and females are more likely to turn to social media compared to their older/male counterparts (Kircaburun et al., 2020; Techentin et al., 2022). According to the uses and gratifications theory (Katz et al., 1973), when activities fulfill gratifications sought individuals are more likely to return to that activity in the future to fulfill that need again. Thus, one could expect that the young adult female sample, who likely used social media regularly before the pandemic

and has had previous success meeting social needs, would be considered as successful when using social media to meet social needs during the pandemic. Older adults and males, whose social media use was previously less driven by social reasons, may have provided slightly different results for their social media experiences during the pandemic. Finally, respondents were asked to retrospectively report their social media use prior to the pandemic. Because of the notable concerns that threaten the validity of retrospective reports (Schwarz & Sudman, 1994), the recall of social media use prior to the pandemic may be subject to response error. Although concrete conclusions cannot be made regarding the amount of increase in social media use, the current study, more importantly, documents perceptions in change of social media use as a function of the pandemic.

Despite the limitations, the current study does have notable strengths. The current research used a mixed-methods approach to summarize average experiences and provide a detailed context of gratifications sought and met through social media use during the initial stages of the pandemic in Canada. The structured questions allowed for similarities and differences to be identified across respondents, while still capturing adults' experiences in their own voice. Also, the individuals' responses were not focused on a singular platform. By representing experiences in adults' polymedia environments, the current study allowed for a more wholesome portrait of social media use during the pandemic.

4.3. Conclusion

Overall, the quantitative and qualitative data provide evidence of an increase in social media use (across most of the popular social media platforms) to compensate for the lack of face-to-face connection associated with the initial stages of the COVID-19 pandemic. Although Canadian adults across all age categories expressed concern for the amount of time they spent on social media, most viewed social media as a necessity to meet socialization and entertainment needs during a time of forced physical distancing. Albeit the potential for information overload, social media addiction and negative affect, the results suggest that maximizing the potential of social media to maintain or increase connections may be beneficial for well-being for Canadians in early and middle adulthood. Healthy social media use, post-pandemic, will require users to be mindful of their motives for using social media and regulating its use accordingly. This should include online socialization to be regarded as a supplementary tool when in-person interactions are limited by physical and social constraints.

Institutional Review Board Statement

The study was conducted in accordance with the Tri-council Policy Statement: Ethical Conduct for Research Involving Humans-TCPS 2 (2018) and approved by the Human Research Ethics Board of Mount Royal University (approved on April 21, 2020, file #102208). Informed consent was obtained from all partici-

pants involved in the study.

Availability of Data

The data presented in this study are openly available in Open Science Framework at osf.io/2dpw6.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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