Well-Being in the Age of COVID-19: The Role of Social Distancing

Darian Dik, A.A., Department of Psychology

Idalis Rivera-Ramirez, B.A., Department of Psychology

Sneha Hirulkar, M.D., Department of Psychology

Kate Sweeny, Ph.D., Department of Psychology, University of California, Riverside

Abstract

In March of 2020, the World Health Organization declared COVID-19 an international public health emergency. In an attempt to slow the spread of COVID-19, the CDC recommended implementing social distancing practices. In this study (N = 732), we examined self-reported indicators of social distancing (e.g., avoiding physical contact, declining social gatherings), duration of social distancing (in days), and the number of times participants went outside in the past week as simultaneous predictors of various measures of well-being (i.e., loneliness, emotional states). When controlling for overall satisfaction of life, findings suggested that individuals who reported higher levels of social distancing also reported more negative emotions, less positive emotions, and more anxiety symptoms. Surprisingly, individuals who reported higher levels of social distancing reported *less* loneliness. Individuals who reported going outside more often also indicated less loneliness, fewer depressive symptoms, and fewer anxiety symptoms. These findings suggest that social distancing practices play a substantial but nuanced role in well-being in the context of the COVID-19 pandemic.

KEYWORDS: Social distancing, COVID-19, Well-being, Loneliness, Anxiety

Introduction

The World Health Organization declared the spread of severe acute respiratory syndrome (SARS) coronavirus-2, the cause of the coronavirus disease (COVID-19), an international health crisis in early March of 2020. Since then, many people have lost loved ones to COVID-19 and have been presented with unique challenges as a result of social restrictions. The health and well-being of the world started to be affected by this deadly pandemic in terms of unemployment or job loss, restricted social gatherings, isolation from family and friends, and lockdown guidelines. As the pandemic progressed, the Center for Disease Control and Prevention (CDC) recommended that individuals engage in mask wearing, social distancing, and increased handwashing to slow the spread of COVID-19 (Centers for Disease Control and Prevention, 2020). Prioritizing public health measures continues as various countries attempt to manage the profound effects of COVID-19. The current investigation sought to understand the well-being implications of restrictions that resulted from COVID-19 in the early days of the outbreak in the United States.

Previous SARS Outbreak

The COVID-19 pandemic has paralleled previous outbreaks in the unprecedented series of lockdowns and related restrictions. Public health and infection control measures were put in place following the first outbreak of SARS in 2003. Patients in a Canadian hospital, infected with SARS, expressed frustration regarding their feelings of loneliness and boredom as a result of limited contact with others (Maunder et al., 2003). While the former study examined the effects, SARS had on the well-being of infected patients, similar experiences were reported by non-infected individuals during the outbreak. Longer durations of quarantine, loss of usual routine, and reduced social and physical contact with others were associated with poorer mental

health, frustration, boredom, and feelings of isolation (Reynolds et al., 2007). These studies examined both infected and non-infected individuals during the SARS outbreak and found worrying similarities in self-reported psychological impacts.

Following the outbreak in 2003, several studies aimed to examine the long-term psychological implications of SARS on people around the world. One study found that SARS survivors showed higher levels of stress, depression, anxiety, and posttraumatic symptoms one year after the outbreak (Lee et al., 2007), and a study at 30-months post-SARS detected post-traumatic stress disorder, depressive symptoms, and other anxiety spectrum disorders in SARS survivors (Mak et al., 2009). As the SARS outbreak reached containment and a sense of normalcy returned, lasting psychological effects lingered for many people.

Psychological Impacts of COVID-19

Current research on the psychological impacts of the COVID-19 pandemic has raised concerns about the psychological health and well-being of people worldwide. When comparing individuals exposed to varying natural disasters to their pre-exposure state, they were found to have higher levels of psychiatric disorders, including post-traumatic stress disorder and depression (Rashid & McGrath, 2020).

Health professionals fear that the ongoing state of the pandemic and quarantine measures may have serious and lasting consequences on health and well-being. Social distancing measures, including avoiding social gatherings and physical contact, have been mandated by many state and local governments to slow the spread of COVID-19. When public health measures include higher levels of restriction, people suffer in terms of higher loneliness, higher psychological distress, lower life-satisfaction, and poorer mental health (Benke, 2020). Moreover, research on previous pandemics has found long-lasting psychological effects on

individuals' well-being; thus, it is likely that the restrictions related to COVID-19 will have similar effects.

The Current Study

The present study seeks to understand the role of social distancing on well-being and emotional health during COVID-19—specifically whether social distancing and physical restrictions (operationalized as number of days participants had been outside) during the early days of COVID-19 in the U.S were associated with positive or negative emotion, depressive or anxious symptoms, or loneliness. We chose to focus on these well-being metrics because they combine general emotional states with subclinical mental health symptoms, as well as a key negative experience during a period of social isolation (i.e., loneliness). We hypothesized that engaging in a greater degree of social distancing, engaging in social distancing for a longer duration, and spending fewer days outside would predict poorer well-being overall during this period. This research question is important because well-being is associated with a host of beneficial life outcomes (e.g., Lyubomirsky, King, & Diener, 2005).

Method

Participants and Procedure

Adult participants in the U.S. (N = 732; 77% female; M_{age} = 36; 48% White/Caucasian, 27% Latinx, 17% Asian, 2% Black/African-American, 2% Pacific Islander, 5% prefer not to say) were recruited via snowball sampling in April 2020 at the time of the emergence of COVID-19 social distancing guidelines enforced by the CDC. Participants were asked to complete a self-report questionnaire online using Qualtrics. The survey was completed on a voluntary basis without compensation.

Measures

Social Distancing

Social distancing was assessed by the reported number of days spent engaging in social distancing (defined as maintaining a physical distance from other people or minimizing direct contact with individuals in public places; $M = 16.67$, $SD = 7.88$). Additionally, we assessed degree of social distancing by asking participants the extent to which they followed six social distancing practices ("No social gathering with friends," "Cancelling events or plans to go to an event," "Stop going to church or attending other community activities," "No handshaking, hugs, or kisses when greeting," "Wash your hands frequently," "Do not touch your face with your hands"). Participants rated the frequency of these practices on a Likert scale ranging from 1 = *do not consider the follow*ing to 4 = *follow frequently, everyday* ($M = 3.68$, $SD = .28$, Cronbach's $\alpha = .55$).

Time Spent Outside

Time spent outside was assessed by participant' report of the number of times participants left their house within the past week ($M = 5.06$, $SD = 5.32$).

Measures of Well-Being

Well-being was assessed with measures of loneliness, depression and anxiety, and positive and negative emotions.

Loneliness. Loneliness during the past week was assessed using the three-item Brief Loneliness Measure (Hughes et al., 2004; "How often have you felt that you lacked companionship?" "How often have you felt left out?" "How often have you felt isolated from others?"; 1 = *hardly ever*, 3 = *often*; $M = 1.78$, $SD = .62$, $\alpha = .80$).

Depression and Anxiety. Depression and anxiety symptoms experienced in the past week were assessed using the Brief Symptom Inventory (Derogatis & Fitzpatrick, 2004; 1 = *not*

at all, 5 = *a great deal*). The inventory includes a six-item depression subscale (e.g., feeling no interest in things, feelings of worthlessness; M = 2.16, SD = .87, α = .85) and a six-item anxiety subscale (e.g., feeling fearful, spells of panic; M = 2.48, SD = .96, α = .90).

Positive and Negative Emotions. Emotions experienced in the past week were assessed using the Scale of Positive and Negative Experience (Diener et al., 2009; 1 = *very rarely or never*, 5 = *very often or always*). The scale includes a six-item positive emotion subscale (e.g., good, happy; M = 3.17, SD = .74, α = .90) and a six-item negative emotion subscale (e.g., sad, afraid; M = 2.71, SD = .78, α = .87).

Satisfaction with Life

Satisfaction with life was assessed with the 5-item Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffith, 1985; e.g., "I am satisfied with my life"; 1 = *strongly disagree*, 7 = *strongly agree*; M = 4.80, SD = 1.36, α = .89).

Results

We tested our hypotheses using multiple regression analyses predicting well-being (each measure separately) from social distancing duration, social distancing engagement, and days outside, controlling for satisfaction with life (Table 1). Results suggest that engaging in social distancing behaviors (e.g., avoidance of gatherings, cancelling events, frequent of handwashing and touching) was negatively associated with measures of well-being except for loneliness and depressive symptoms. Specifically, greater engagement in social distancing practices predicted more anxiety (p = .04), more negative emotion (p = .05), and less positive emotion (p = .002), but less loneliness (p = .02; unassociated with depressive symptoms, p = .92). Number of days spent social distancing did not significantly predict any measure of well-being. More time spent outside predicted less loneliness (p = .01), less anxiety (p = .03), and less depression (p = .001)

but was not associated with positive (p = .45) or negative emotion (p = .59). Overall, complying with social distancing measures in an attempt to slow the spread of COVID-19 was associated with poorer well-being.

Table 1. *Associations Between Degree of Social Distancing, Duration of Social Distancing, and Time Spent Outside with Well-being Measures*

	Social Distancing	Days Distancing	Time Outside
Loneliness	-.09*	.01	-.10
Positive emotion	-.12**	.02	.03
Negative emotion	.08*	.04	-.03
Anxious symptoms	.09*	.06	-.08*
Depressive symptoms	-.004	-.04	-.12**

Note: *p < .05, **p < .01. Estimates are standardized betas.

Discussion

Our hypotheses were largely, but not entirely supported. Specifically, greater adherence to social distancing guidelines predicted worse well-being on most measures, and more time spent outside predicted better well-being on some measures. These findings are in line with other recent research on the effects of COVID-19 pandemic on well-being (Torales et al., 2020). Contrary to our hypotheses, although adherence to social distancing guidelines was predictive of well-being, surprisingly the duration of distancing was not. We speculate that since data collection was conducted in the very early phases of the pandemic in the U.S., the duration of social distancing may not have had sufficient time to show a significant impact on well-being.

Perhaps the most interesting finding is that adhering to social distancing practices predicted less loneliness, not greater loneliness as we anticipated—which may be logical given

the nature of social distancing. Previous research on the association between social distancing and loneliness has had mixed results, but in some cases, these results paralleled recent findings. Although a decrease in loneliness paired with social isolation seems counterintuitive, collective adherence to social distancing requirements can be associated with a sense of community and togetherness (Luchetti et al., 2020). In fact, community support improves collective mental health after natural disasters (Torales et al., 2020; Stevenson et al., 2020; Lau et al., 2008). It is also possible that interactions via online platforms (e.g., Zoom happy hours) buffered loneliness, or even reduced it, among those engaging in social distancing practices. Overall, these findings offer insights into the complex role social distancing practices have on well-being in the midst of such a catastrophic pandemic.

Limitations and Future Directions

The impact COVID-19 has made on the world is significant and will not be easily undone. It is in these times that studying the adverse mental health effects caused by the pandemic can help in the healing process. However, further research is needed to assess the longitudinal impact of COVID-19 and to understand which interventions effectively improve well-being. As this study was cross-sectional, it did not allow us to examine longitudinal patterns of social distancing and well-being, nor were we able to compare participants' well-being before and during the COVID-19 pandemic. A valuable future study would take the same measurements a year later to see if there has been an increase, decrease, or no change in well-being, social distancing practices, and time spent outside in the population. Perhaps well-being has continued to suffer as the pandemic has persisted, or perhaps people have adapted to the current conditions. It is also important to note that the snowball sampling technique used for participant recruitment is not representative of the entire population.

Conclusion

The protocols implemented to slow the spread of COVID-19 seem to have negatively affected people's well-being. This result is consistent with previous research, indicating that when public health measures include higher levels of restriction, associations with higher loneliness, higher psychological distress, lower life-satisfaction, and poorer mental health, emerge (Benke, 2020). While this pandemic may continue, we hope that community support and mental health coping skills can assist in increasing the general well-being of the population.

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