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Role of Context in Daily Boredom Experiences During the COVID-19 Pandemic: A Daily Diary Study

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Abstract: Boredom is typically an experience from which most people want to escape. However, what happens when external constraints are placed on people's lives such as living through a pandemic and having to follow lockdown protocols? How does this affect their boredom experiences? In this 7-day daily diary study with 289 adults from the United States, we empirically tested how the changes in people's daily lives brought on by the COVID-19 pandemic, specifically, the amount of time they spent at home and the amount of time they spent alone, influenced the level of boredom they experienced on a given day. We also tested how the changes in people's daily meaning in life, which had also been impacted by the pandemic, influenced people's daily boredom experiences. Results from multilevel modeling showed that on days when people spent more time alone and experienced lower daily meaning in life, they experienced higher levels of boredom. However, the amount of time spent at home did not predict daily boredom. This study contributes to boredom literature by highlighting the impact that contextual factors have on people's boredom experiences. Typically, psychological research on boredom has focused on the characteristics of a specific activity that people are engaged in, or by their dispositional propensity to feeling bored. Understanding the role of people's contexts can help us devise nuanced and effective boredom coping interventions.

Keywords: boredom, COVID-19, daily meaning in life, daily diary, social contexts.

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1. Introduction

Boredom is a frequent, and almost daily experience in many people's lives (Chin et al., 2017; Finkielsztein, 2023; Misztal, 2016). It gained much attention from scholars and popular media during the COVID-19 pandemic lockdown as many people expressed feeling bored more frequently during this time (Ballew et al., 2020; Irawan et al., 2020; Jackson et al., 2021). About 67% of Americans said they felt bored in the initial days of the pandemic, and 21% of them said they felt very bored (Ballew et al., 2020).

This was alarming considering the negative effect that boredom has on mood (Brent and Birmaher, 2002; Patterson and Pegg, 1999), productivity (e.g., Cleary et al., 2016), and mental health (e.g., Spaeth et al., 2015). For instance, longitudinal studies have found that chronic boredom experiences amplify depressive symptoms of loneliness and hopelessness (e.g., Spaeth et al., 2015) and are associated with developing depression, anxiety, and suicidal tendencies (Brent and Birmaher, 2002; Patterson and Pegg, 1999). People are also twice as likely to abuse alcohol, marijuana, and cigarettes (Iso-Ahola and Crowley, 1991; Sharp et al., 2011), and engage in risky behaviors such as unsafe sexual activities, rash driving (Kılıç et al., 2020; Layland et al., 2021; Miller et al., 2014), and binge eating (Jackson et al., 2021; Laghi et al., 2015) when bored.

Most research on boredom has either focused on trait boredom (boredom proneness) or on momentary episodes of boredom experienced within a specific activity. Studies on boredom proneness have focused on answering questions about who is more prone to feeling bored (Farmer and Sundberg, 1986; Hamilton, 1983), and is more at risk of experiencing the negative consequences of boredom (Mikulas and Vodanovich, 1993; Petry, 2001; Vodanovich and Watt, 2016). Studies on state boredom have focused on what characteristics of an activity make people feel bored (Csikszentmihalyi, 1975; Pekrun et al., 2010; Westgate and Wilson, 2018) and what cognitive, emotional, and motivational experiences people have when they are bored (Eastwood et al., 2012; Fahlman et al., 2013; Harris, 2000).

However, just like other emotions, people's boredom experiences vary daily based on the physical and social contexts they are a part of on a given day (Chin et al., 2017; Eaton and Funder, 2001; Larson et al., 2002). For example, though students typically feel bored when they perceive their math class is not challenging or meaningful enough to them (Nett et al., 2011), and some students are more prone to feeling bored than others (Pekrun et al., 2014), the level of boredom that these students feel during each math class can vary across the week (Nett et al., 2011). A few experience sampling studies show that on days when people spend more time alone, they are more likely to feel bored (Chin et al., 2017; Larson and Richards, 1991), or when they spend a prolonged period of time in the same physical space (Behan, 2014; Bengtsson, 2012; Britt et al., 2017; Collins, 2003; Garner, 2020). Studying the role of such contextual factors helps us create better boredom coping strategies and enhance current approaches to mitigating boredom. However, the literature on the influence of such social and physical contextual factors on daily boredom is limited.

The COVID-19 pandemic offered a unique opportunity for boredom researchers to study the influence of contextual factors on people's daily boredom experiences, as people's daily lives were changed by the lockdown protocols. People were now required to spend more time at home and physically distance from other people. Given that people's boredom experiences had

increased during the pandemic (Ballew et al., 2020), it warranted testing whether these changes to their daily life were influencing the changes in their boredom experiences.

Additionally, the changes to daily life prompted many people to question their meaning in life during the pandemic (Ekwonye et al., 2021). Researchers found that people's daily meaning in life varied during this time (Trzebiński et al., 2020) and people who viewed their life as being purposeful, valuable, and significant, also felt more hopeful and less anxious about the pandemic (Hill et al., 2022).

Boredom researchers have increasingly been interested in understanding the relationship between boredom and meaning (Finkielsztein, 2023). Some scholars describe boredom as an experience of lack of meaning (Barbalet, 1999; Elpidorou, 2018; Westgate and Wilson, 2018) and that the function of boredom is to signal an individual to seek more meaning (Elpidorou, 2022). People do feel bored when they perceive the task they are engaged in has little value or significance to them (Van Tilburg and Igou, 2012; Westgate and Wilson, 2018), or when they feel their life in general has no meaning and purpose (Barbalet, 1999; Ohlmeier et al., 2020). Though many researchers have studied the role of task value and meaning on boredom (e.g., Pekrun et al., 2010; Van Tilburg and Igou, 2012), the relationship between daily meaning in life and boredom remains relatively less explored. The pandemic therefore also provided an opportunity for boredom researchers to empirically test whether people's daily meaning in life influences how bored they feel, and whether it can serve as a protective factor that can help reduce boredom.

The goal of the current study was to test whether people's daily physical and social contexts, and their level of daily meaning in life, influence their daily boredom experiences. Specifically, this study tested whether spending more time at home, spending more time alone, and experiencing lower levels of daily meaning in life were associated with higher levels of daily boredom. The daily diary method was used to capture greater intra-individual variability as people's contexts and boredom experiences change from day to day. Before describing the details of this study, let us understand how boredom is defined and examine relevant literature.

1.1. Defining Boredom

Our understanding of what boredom is has evolved over time. The word boredom first appeared in Charles Dickens' book *Bleak House* in 1852, but the exact etymology of the word is unclear. Some scholars believe that boredom is a relatively new term, one that emerged in the 18th century after the advent of the Industrial Revolution. However, the experience of boredom is not new. The ancient Greeks captured this feeling as *acedia*, which is close to Latin's *tedium*, and the French *ennui*. Historians reveal that Pyrrhus, the Greek General, was bored during his retirement, and that the graffiti found on the walls in ancient Rome reflects bored adolescents (McRobbie, 2012). While philosophers like Plato and Aquinas lauded the monotony and uniformity of life because they serve as a moral constancy to man (Kuhn, 1976), other philosophers, such as Kierkegaard and Sartre shared a disdain for boredom as they believed it was "the root of all evil" and the "leprosy of the soul" (Martin et al., 2006, p. 195).

Today, people use the word boredom to describe the unpleasant feeling they have when they have nothing to do, are doing something repetitive, unstimulating or uninteresting, or when

they are unable to do what they want (Goldberg et al., 2011). In psychological research, we define boredom either in terms of the immediate affective, cognitive, and motivational experience of being bored (Eastwood et al., 2012; Fahlman et al., 2013; Merrifield and Danckert, 2014), or the conditions that give rise to a state of boredom (Csikszentmihalyi, 1975; Pekrun et al., 2014; Westgate and Wilson, 2018).

As an experience, boredom is a high and low arousal negative affect (Mikulas and Vodanovich, 1993) that is accompanied by cognitive challenges such as inattention and perceiving time as passing slowly, and motivational challenges wherein a person wants to escape from the situation or is unable to continue to be engaged with the activity (Eastwood et al., 2012; Fahlman et al., 2013). In fact, the experience of boredom is often so intolerable that people would rather electrically shock themselves (Havermans et al., 2015; Nederkoorn et al., 2016; Weingarten et al., 2016; Yusoufzai et al., 2022) and view repulsive pictures than continue to be bored (Bench and Lench, 2019).

The conditions that give rise to boredom can be classified into two categories: a) suboptimal level of challenge and b) a lack of meaning. According to flow theory, people feel bored when an activity does not provide adequate challenges that engage their skills in an enjoyable way (Csikszentmihalyi, 1975). Boredom is placed on the lower end of the challenge-skill continuum. If this lack of challenge motivates a person to seek higher challenges that are demanding of their skills, they can move away from a state of boredom and enter the enjoyable state of flow (Csikszentmihalyi, 1975, 1990). However, research shows that people feel bored in high challenge situations as well (Acee et al., 2010; Westgate and Wilson, 2018).

According to the Meaning and Attentional Components (MAC) model of boredom (Westgate and Wilson, 2018), even if a person's attention is successfully engaged with an activity, if the activity is not personally significant to them, they feel bored. The functional theorists of boredom believe the purpose of boredom is to signal us whenever we are engaged in meaningless activities so that we may either try to find meaning in what we are doing or do something else that is more meaningful to us (Bench and Lench, 2019; Elpidorou, 2018). In this study, we viewed daily boredom as a multidimensional experience that is characterized by feelings of disengagement, negative affect, inattention, and time distortion (Fahlman et al., 2013).

1.2. Role of Physical Context in Boredom Experiences

While boredom is often seen in relation to what people were doing, the context in which they are doing these activities (or not doing anything), also influences the extent to which they feel bored. For instance, people are more likely to be bored when they are in school, work, medical facilities, or at the airport (Chin et al., 2017). People are typically required to stay in these spaces for long periods of time and spending prolonged periods of time in the same physical space can be boring (Britt et al., 2017).

Being confined to the same space with very little opportunities to leave can be even more boring. Astronauts have been found to experience high levels of boredom during space missions (Britt et al., 2017; Collins, 2003), so much so that active counter measures are now being researched as part of planning for space missions (Gatti et al., 2022; Laws et al., 2022). Incarcerated people also describe boredom as a very difficult part of prison life (Rocheleau,

2013). For example, juvenile delinquents in Denmark and prisoners in Australia reported they felt bored very often and constantly craved for something to change in their routine (Bengtsson, 2012; Garner, 2020). The monotony of being confined to the same space, and the lack of autonomy and mobility to pursue alternate activities or spaces, contribute to higher levels of boredom (Behan, 2014; Bengtsson, 2012; Britt et al., 2017; Collins, 2003; Garner, 2020).

The COVID-19 pandemic restricted people's access to public spaces and the stay-at-home orders required people to spend more time at home. The increased amount of time that people had to spend in the same physical space due to the stay-at-home orders could have contributed to the increase in people's daily experiences of boredom during the pandemic. Therefore, the first hypothesis of this study was that on days when people spent more time at home, they would experience higher levels of boredom.

1.3. Role of Social Context in Boredom Experiences

In addition to being confined to the same space, not having anyone to interact with can also be boring. People are 42% more likely to feel bored when they are alone than when they are with others (Chin et al., 2017), and often find it difficult to spend even 6 to 15 minutes by themselves without feeling bored (Wilson et al., 2014).

Although spending time alone is a natural part of people's daily life, people typically experience daily solitude as loneliness (Larson, 1990), especially if they live alone (Long et al., 2003). Loneliness was a common experience during the pandemic (Ballew et al., 2020; McKenna-Plumley et al., 2021), as people were asked to socially distance and minimize the amount of time they spent with other people. Healthy adults in the United Kingdom who were interviewed in April 2020, said they felt lonelier during the lockdown, as their routine of seeing other people was disrupted. They also said they felt "quite isolated because it's not the same [as interacting] on a phone call or on a video chat" (McKenna-Plumley et al., 2021, p. 7). They also felt "very weird" to not have "any physical contact with other people and it's just not really normal to not touch anyone" (McKenna-Plumley et al., 2021, p. 8).

When alone, people experience role confusion, that is, they perceive they have no social role to play as they are not in a social situation with well-defined roles for each social actor (Darden and Marks, 1999). People say they feel bored when they have nothing to do or when they are alone "because [they] do not know what to do" with themselves (Darden and Marks, 1999, p. 26). Having to spend more time alone during the pandemic due to the social distancing protocols could have contributed to higher levels of boredom. Therefore, the second hypothesis of this study was that on days when people spent more time alone, they would experience higher levels of boredom.

1.4. Role of Daily Meaning in Life in Boredom Experiences

In addition to physical and social contexts, people's perceptions or evaluations of their life such as how meaningful they feel their life is on a given day provides an experiential context or lens through which they evaluate the meaningfulness of the activities they did on that day (Machell et al., 2015; Newman et al., 2018). On days when people experience lower levels of meaning in life, they also experience more negative affect and perceive the activities they are engaged in to be mundane and insignificant (Machell et al., 2015; Newman et al., 2018). People who spend

more time searching for meaning and experience very low presence of meaning, are more likely to ruminate about their past and have a fatalistic view of the present (Krok, 2018; Steger et al., 2008). Such cognitive and emotional challenges of searching for meaning in life may contribute to increased boredom as people find it difficult to concentrate and engage with their environment when they feel fatigued and mentally exhausted (Dora et al., 2021; Eastwood et al., 2012; Raffaelli et al., 2018).

During the pandemic, many people found it challenging to view their lives as being meaningful as the lockdown measures considerably changed the structure of their daily lives and limited their access to valuable activities and relationships (Ekwonye et al., 2021; Hill et al., 2022). Experiencing lower levels of daily meaning during the pandemic may have contributed to higher levels of daily boredom. Hence, the third hypothesis of this study was that on days when people experienced lower levels of daily meaning in life, they would experience higher levels of boredom.

1.5. The Current Study

The goal of this study was to understand how the changes in people's daily contexts brought on by the COVID-19 pandemic would relate to their daily boredom experiences. Specifically, it aimed to study whether spending more time at home, spending more time alone, and the level of daily meaning in life would influence people's daily boredom experiences over and above the relatively stable characteristics of their lives such as trait boredom levels, age, gender, and living alone (since before the pandemic). The following three hypotheses were tested in this study: 1) On days when people spend more time at home, they will experience higher levels of boredom. 2) On days when people spend more time alone, they will experience higher levels of boredom. 3) On days when people experience lower levels of meaning, they will experience higher levels of boredom.

2. Method

The data for this study was drawn from a larger study on the daily experiences of people during the COVID-19 lockdown. This study was approved by the university Institutional Review Board. After obtaining informed consent, 648 participants responded to an intake survey on Amzon's Mechanical Turk. Those who were less than 18 years of age or those who failed an English proficiency test were excluded. Participants who reported experiencing COVID-19 related symptoms or were caring for someone who was experiencing symptoms were also excluded, as this study intended to investigate the impact of the COVID-19 lockdown on daily experiences and not the effects of the COVID-19 disease itself. A total of 475 individuals were invited to participate in the diary study for seven consecutive days, of which 300 individuals completed daily diary surveys on at least five out of seven days. Each day participants were asked to respond to questions about their daily emotional and social experiences. At the end of the week, they were asked to complete an end of study survey that consisted of trait measures. Participants who did not complete the end of study survey (n = 5) and participants who failed at least one of the two attention checks that were embedded in this survey (n = 6) were excluded from the final sample.

A final sample of 289 adults from the United States, ages 19 to 75 years (M_{age} = 40.93, *SD* = 13.29, 59.5% female) completed a 7-day daily diary study. Seventy percent of the sample had a college degree or higher. Participants provided a total of 1,992 diary surveys. Individuals were included if they completed at least five valid diary surveys (i.e., responded to the survey between 5:30pm and 12:30am each day), and completed the end of study survey. On average, each participant in the sample provided 6 diary surveys (*SD* = .35). At the time of data collection, 93% of the sample reported they were under stay-at-home orders and had been on lockdown for an average of 24 days (*SD* = 7.68). Forty-eight percent of participants said the COVID-19 protocols had required them to work from home. Participants received a maximum compensation of $10.70 ($0.20 for the intake survey, $1 for each of the seven diary surveys, $2 for the end of study survey, a bonus of $0.50 on the third day and a bonus of $1 on the seventh day of the diary surveys).

2.1. Measures

2.1.1. Daily Measures

Daily Boredom. The short version of the Multidimensional State Boredom Scale (MSBS-15; Baratta and Spence, 2015) was used to measure the daily intensity of boredom. This scale is designed to assess how bored a person feels in the moment. The items were adapted to measure how bored participants felt each day. The scale consists of 15 items and 5 subscales that measure disengagement (e.g., "I feel like I'm sitting around waiting for something to happen"), inattention (e.g., "It is difficult to focus my attention"), time perception (e.g., "Time is moving very slowly"), high arousal (e.g., "I feel agitated"), and low arousal (e.g., "I feel empty"). Items were completed using a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Higher scores on the scale indicate higher levels of boredom. This scale has been found to have high internal consistency (Cronbach's α = 0.96, Fahlman et al., 2011). Participants also reported how frequently they were bored on a given day using a 5-point scale (1 = *not at all*, 5 = *for most of the day*).

Time at Home. Participants were asked to indicate how much time they spent at home on a given day, using a 7-point scale (1 = *none*, 7 = *all of the time*).

Time Alone. Participants were asked to indicate how much time they spent alone on a given day, using a 7-point scale (1 = *none*, 7 = *all of the time*).

Daily Meaning in Life. Daily meaning in life was measured using four items that have been used in previous diary studies (Kashdan and Steger, 2007; Newman et al., 2018). Daily presence of meaning was assessed using the items "How meaningful did you feel your life was today?" and "How much did you feel your life had purpose today?" Daily search for meaning included the items "How much were you searching for meaning in your life today?" and "How much were you looking to find your life's purpose today?" Participants responded to each item using a 7-point scale (1 = *not at all*, 7 = *very much*). Responses to each of the items were aggregated to create a single composite score that indicated the level of daily meaning in life.

2.1.2. Person-level Measures

Boredom Proneness. This was included as a control variable and was measured using the Boredom Proneness Scale (BPS; Vodanovich and Kass, 1990). This scale assesses the extent to

which an individual is prone or susceptible to experiencing boredom (Farmer and Sundberg, 1986). This version of the scale consists of 28 items (e.g., "I am often trapped in situations where I have to do meaningless things" and "Many things I have to do are repetitive and monotonous") which participants respond to on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Higher scores indicate higher boredom proneness. The BPS has been shown to have high internal consistency, with Cronbach's alpha values ranging from .79 to .84 (Vodanovich and Watt, 2016).

2.2. Analysis Plan

Multilevel modeling (MLM) that modeled days (level 1) nested within individuals (level 2) was used with maximum likelihood estimation on IBM SPSS 25 to test whether spending time at home, spending time alone, and daily meaning in life predicted daily levels of boredom, while controlling for boredom proneness, age, gender, and whether the participant was living alone during the lockdown. Day-level predictors were group mean centered and person-level control variables were grand mean centered. A null model was tested with daily boredom. The intraclass correlation (ICC) was calculated to assess the proportion of between-person and within-person variance in the level of daily boredom experiences. The analysis showed that 56.7% of the variance in boredom experiences was due to between-individual differences, warranting the use of multilevel analysis. As the overall goal of this study was to understand how the changes brought on by the COVID-19 pandemic contributed to people's daily boredom experiences, predictors were sequentially added into the model to test their combined effects on daily boredom (Nezlek, 2008). Three subsequent models were run with fixed effects of each of the three day-level predictors being sequentially added. All of the person-level control variables were included in each model. Model comparisons were made to estimate the best fitting model (Table 3).

3. Results

3.1. Descriptive Analysis

Prior to the analysis, all variables were examined for normality and assumptions underlying multilevel analysis. The means, standard deviations, and correlations of all study variables (Table 1 and Table 2) were calculated. All study variables were normally distributed.

Overall, 37% of participants experienced boredom on any given day and 80% were bored at least once during the week. Participants reported experiencing low to moderate levels of daily boredom during the study period (M = 2.36, SD = 1.36). Participants also reported spending a considerable amount of time at home (M = 6.09, SD = 1.36) during the study period. On a given day, 55% of them said they were "always" at home. Forty-eight percent of the participants also reported they had been working from home due to the COVID-19 protocols. On a given day, 76% of participants said they spent at least some time alone and 12% said they were "always" alone.

Table 1. Descriptive Statistics for Study Variables

Measure	M *(SD)*/%	ICC
Day Level		
Daily boredom [1-7]	2.36 *(1.36)*	.56
Time spent at home [1-7]	6.09 *(1.36)*	.41
Time spent alone [1-7]	3.45 *(2.09)*	.68
Daily meaning [1-7]	3.82 *(1.35)*	.69
Person Level		
Boredom proneness [1-7]	3.30 *(.81)*	-
Age	40.93 *(13.29)*	-
Gender (female)	59.3%	-
Live alone (yes)	14.2%	-

Note. $N = 289$ (day level $n = 1{,}992$).

Table 2. Correlation Matrix of Day Level Study Variables

Variable	1	2	3	4
Daily boredom	1			
Time spent at home	-.062**	1		
Time spent alone	.150**	.158**	1	
Daily meaning	-.310**	-.039	-.112**	1

** $p < .01$.

3.2 Fixed Effects of Time Spent at Home, Time Spent Alone, and Daily Meaning in Life

Three models using multilevel modeling were run using daily boredom as the outcome variable. Standardized and unstandardized estimates of fixed effects are presented in Table 3. The first model tested the fixed effects of the amount of time spent at home on daily boredom, while controlling for boredom proneness, age, gender, and living alone. The fixed linear effect for time spent at home ($\beta = .05$, $p < .01$), was found to be significant.

The addition of time spent at home in the second model significantly improved the model compared to the first, Δ-*2LL* (1) = 46.32, $p < .001$. In this model, only the fixed linear effects for time spent alone ($\beta = .17$, $p < .001$) were significant, and time spent at home no longer significantly predicted daily boredom.

In the third model, which was the best fitting model (Δ-*2LL* (1) = 231.16, $p < .001$), daily meaning was added. The fixed linear effects for time spent alone ($\beta = .15$, $p < .001$) and daily meaning ($\beta = -.42$, $p < .001$) were significant while time spent at home was not significantly associated with daily boredom.

Results from this model comparison indicate that there was no significant increase in the level of boredom people experienced on days when people spent one standard unit more time at home, compared to the days when they spent an average amount of time at home. However, on days when people spent one standard unit more time alone, their boredom levels increased by .15, compared to days when they spent an average amount of time alone. Also, on days when people perceived having one standard unit higher level of daily meaning, their boredom levels

decreased by .42, compared to days when they perceived having an average level of daily meaning in life.

Therefore, the first hypothesis that on days when people spend more time at home, they will experience higher levels of boredom was not supported by this data. But, the second hypothesis that on days when people spend more time alone, they would experience higher levels of boredom was supported, as was the third hypothesis that on days when people experience lower levels of daily meaning in life, they will experience higher levels of boredom.

Table 3. Multilevel Regression Results of Daily Boredom Experiences during the COVID-19 Pandemic

Variable	*B*	95% CI for *B*		*SE B*	β	*-2LL*	Δ*-2LL*
		LL	*UL*				
Model 1						5775.81	-
Intercept	1.86***	1.34	2.39	.26			
Time spent at home	.05**	.01	.09	.01	.05**		
Boredom proneness	.787***	.66	.91	.06	.46***		
Age	-.002	-.01	.006	.004			
Gender	.147	-.05	.34	.10			
Live alone	.285*	.001	.56	.14			
Model 2						5729.48	46.324***
Intercept	1.64***	1.12	2.16	.26			
Time spent at home	.01	-.02	.05	.02	.01		
Time spent alone	.11***	.08	.14	.01	.17***		
Boredom proneness	.77***	.64	.89	.06	.45***		
Age	-.001	-.009	.007	.004			
Gender	.184	-.01	.38	.10			
Live alone	-.024	-.31	.27	.15			
Model 3						5498.32	231.164***
Intercept	1.72***	1.20	2.23	.26			
Time spent at home	.01	-.02	.04	.02	.01		
Time spent alone	.10***	.07	.13	.01	.15***		
Daily meaning	-.42***	-.47	-.37	.02	-.42***		
Boredom proneness	.77***	.64	.90	.06	.45***		
Age	-.001	.009	.007	.004			
Gender	.182	-.01	.38	.10			
Live alone	.006	-.28	.29	.14			

Note. CI = confidence interval; *LL* = lower limit; *UL* = upper limit; *SE* = standard error.
* $p < .05$; ** $p < .01$; *** $p < .001$.

4. Discussion

The goal of this study was to empirically test how the changes to people's daily physical, social, and experiential contexts brought on by the COVID-19 pandemic were associated with their daily boredom experiences. This 7-day daily diary study on American adults during the early days of the pandemic lockdown revealed that spending more time alone and experiencing lower levels

of meaning in life contributed to higher levels of daily boredom, while spending more time at home did not.

The finding that people feel more bored on days when they spend more time alone and perceive having lower meaning in life, is consistent with previous literature. People are more likely to be bored in contexts where they are alone or are around strangers (Chin et al., 2017; Cohen-Mansfield et al., 2016; Spaeth et al., 2015). During the COVID-19 pandemic, people were required to socially distance themselves; spending more time alone seems to have contributed to the higher levels of boredom they experienced during this time.

Moreover, many people were prompted to reevaluate their meaning in life during the pandemic (Ekwonye et al., 2021; Hill et al., 2022). The high mortality rates and the significant changes to people's daily activities may have motivated them to think about the value and purpose of their everyday activities (Trzebiński et al., 2020) and influenced their daily boredom. Research shows that people feel more bored when they perceive their lives are not purposeful (Barbalet, 1999) and when the activities they are engaged in are of little value and significance to them (Westgate and Wilson, 2018).

The fact that on days when people experienced higher levels of meaning in life, their boredom levels were lower, indicates that daily meaning in life may serve as a buffer from boredom. Indeed, focusing on increasing one's feelings of value and purpose in life might be an effective boredom coping strategy (Westgate, 2020).

It was surprising that in this study, spending more time at home was not significantly associated with higher levels of boredom experienced on a given day. Previous research shows that people feel more bored when they spend a prolonged amount of time in the same space (Behan, 2014; Bengtsson, 2012; Britt et al., 2017; Collins, 2003; Garner, 2020).

One explanation might be that people were experiencing other negative emotions more strongly than they were experiencing boredom. Studies showed that experiences of anxiety increased by 35% among American adults during the pandemic (Delpino et al., 2022). However, during the initial days of the pandemic, people's levels of anxiety, fear, and boredom were found to be comparable as 21% of Americans said they felt very anxious, 20% said they felt very scared, and 21% said they felt very bored (Ballew et al., 2020). Another explanation for this finding may be that, although people were spending more time at home, doing so might have been a novel, and even welcome, experience rather than a monotonous one during the early days of the pandemic. While working from home during the pandemic was challenging, many adults also found it to be advantageous, as it improved their work-life balance, cut down their time spent commuting, and gave them an opportunity to spend more time with their family (Ipsen et al., 2021; Irawan et al., 2020). A study on time-use during the initial days of the pandemic found that people reported spending more time on their hobbies, housework, sleeping, and physical exercise (Zhang, 2021).

Many people also began to engage with social media a lot more and participated in many cooking and dance trends. Over 315 million people began using TikTok in March 2020 alone, and 65% of TikTok videos showcased new hobbies, pandemic humor, virtual learning, home fitness, and new recipes that people were indulging in (Unni and Weinstein, 2021). Being able

to participate in activities that are otherwise difficult to find time for, and the advantages of working from home, may have buffered people from experiencing higher levels of boredom.

However, research conducted a few months after the pandemic lockdown was initiated showed that people were using more passive and maladaptive ways of coping with boredom such as overeating, drinking and browsing the web (Jackson et al., 2021; Liang et al., 2020; Van Tilburg et al., 2022). Also, in the initial days of the lockdown, people reported feeling more hopeful and believed the pandemic would end soon (Ballew et al., 2020), but when the lockdown persisted, feelings of hopelessness increased (Tao et al., 2022).

The results from this study indicate that perhaps it was the loss of sense of connection that people felt, either with other people or the larger world, that made them feel bored during the pandemic, but not the unique effect of the physical constraint of having to spend prolonged periods of time in the same physical space. As previous research shows, people tend to develop chronic boredom when their life circumstances keep them from pursuing personal goals and projects. They feel emotionally torn and forced when they have to pursue alternate goals and experience a lack of meaning in life, which ultimately can make them feel "stuck in a chronic state of boredom" (Bargdill, 2000, p. 201). These findings demonstrate that people's feelings of boredom are not just influenced by the characteristics of an activity or dispositional tendencies, but also by the contexts in which people are embedded. Moreover, it shows that how people interact and perceive their environments influences their boredom experiences. Hence, research on boredom must take into consideration the role of contextual factors in people's daily boredom experiences.

5. Limitations and Future Directions

One limitation of this study was that it did not test the role of socioeconomic status. The pandemic impacted people from different socioeconomic statuses in different ways (Khanijahani et al., 2021). It was more difficult for people from lower socioeconomic groups to practice social distancing as they were more likely to live in crowded neighborhoods and have unstable job conditions. They were also more likely to be employed in jobs (e.g., in supermarkets, warehouses, public transport) that required them to continue working in person (Patel et al., 2020). Their daily lives and amount of time spent at home and alone would have been different from the participants in our study as 48% of our sample reported working from home during the pandemic. Also, 70% of the sample had a college degree or higher, indicating they may have been from higher socioeconomic groups.

Also, research shows that people's living conditions and the resources available in their physical surrounding play a role in the level of boredom they experience (Chin et al., 2017; Musharbash, 2007; Ohlmeier et al., 2020; Shaw et al., 1996). For instance, people living in rural areas report 5% higher levels of boredom than those living in urban and suburban areas (Martz et al., 2018) and people who have access to engage in a variety of activities are less likely to be bored (Shaw et al., 1996). Future research must take into consideration the role of socioeconomic status when understanding how physical and social contexts influence people's boredom experiences.

Another limitation of this study was that it did not capture how people were spending their time at home. It was not possible to know whether people were in fact engaging in new hobbies and activities during this time and whether doing so buffered against feeling bored. Because many scholars believe that boredom has the potential to motivate people to seek out meaningful activities, future research can focus on what contextual factors and resources scaffold the process of seeking meaning when bored. Additionally, future research can also test whether coping with boredom by seeking more meaning and social connections on one day will reduce the level of boredom experienced the next day.

6. Conclusion

This study empirically showed that people's daily experiences of boredom are indeed influenced by their daily physical and social contexts, as well as how purposeful and valuable they perceive their life to be on a given day. Boredom researchers must take into account how people's daily life experiences, and factors that are peripheral to the specific activities they are pursuing, also influence people's experiences of boredom.

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