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Unmarried and Increasingly Alone: Solitary Leisure Among Unmarried, Solo Dwelling Americans, 1965 to 2018

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Abstract

Remaining unmarried and living alone are becoming more common in Western countries, including the U.S. Prior research has focused on the social lives of these individuals, but it has not focused on how their social lives may be changing. Thus, how the sociality of unmarried adults living alone has changed over time remains unclear. Our analysis examines how social isolation during leisure has changed over six decades, and we assess if such isolation has disproportionately grown among unmarried, solo dwelling Americans. We use six waves of the American Heritage Time Use Study, a harmonized collection of nationally representative time diary datasets spanning 1965 to 2018, and we focus on respondents aged 19 to 65. After adjusting for demographic changes, we find that leisure time spent alone has grown by 118 minutes per day among unmarried solo dwellers, while only growing 40 minutes for others. Further, co-present leisure has fallen by 41 minutes among unmarried solo dwellers while remaining largely unchanged for others. We conclude by discussing the potential consequences of such changes for well-being, as well as highlight the measurement innovations necessary for future time use research to capture the varied ways people socialize in recent decades.

Keyword Social isolation · Time use · Time spent alone · Marital status · America

1 Introduction

Growing social isolation in the U.S. is typically thought to relate to population aging (Hawkey et al., 2019), declines in marriage rates and the growth of solo living (Snell, 2017), and the proliferation of technology in the second half of the 20th century through to today (Hall & Liu, 2022; Parigi & Henson, 2014). Consistent with this perspective, time use studies generally find that time spent alone in Western countries has increased relative to

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past decades (Anttila et al., 2020; Atalay, 2024; Kannan & Veazie, 2023). While this body of research has focused on unequal growth by gender, age, race, educational attainment, and other demographic groups, a focus on marital status and household composition remains absent.

Declines in marriage across Western countries have led to a greater focus on unmarried individuals by researchers and, with this focus, pushback against the perception that being unmarried—specifically, being single—and solo living are necessarily isolating (DePaulo, 2023; Girme et al., 2023; Klinenberg, 2013; Sarkisian & Gerstel, 2016). This work has focused on the social lives of such individuals at specific time points, but, similar to broader assessments of sociality and time use, this body of research has yet to explore how the relationship between being unmarried, solo living, and sociality may be changing (Sarkisian & Gerstel, 2016). This absence from both streams of research leads to our central research question:

Research Question *Has growth in time spent alone among unmarried solo dwellers differed from growth in time spent alone among others, such as married individuals and unmarried individuals living with others?*¹

We define social isolation as time spent without in-person co-presence and without the primary activity indicating phone- or digitally-mediated engagement with family members, friends, neighbors, and acquaintances.² This definition reflects the objective experience of social isolation, not the subjective experience of social isolation—i.e., loneliness—though the two concepts are positively associated (Jose & Lim, 2014; Lennartsson et al., 2022). An advantage of focusing on objective social isolation is that, unlike subjective social isolation, there is high quality historical data available in the U.S. dating back to the 1960s (Fisher, 2015; Luhmann et al., 2022).

When answering our research question, we focus specifically on objective social isolation (hereafter referred to as just “social isolation”) during leisure activities. We do so because growth in social isolation has been partly concentrated within leisure activities (Anttila et al., 2020; Atalay, 2024; Clark, 2002) and because time spent alone during leisure appears especially detrimental to well-being during the activity (Lam & García-Román, 2020) and to mental health more generally (Roeters et al., 2014). Unmarried people and those living alone are important to focus on due to their increasing prevalence in the U.S. population (Bloome & Ang, 2020; Cohen, 2021; Snell, 2017), with one-person U.S. households growing from 20% in 1975 to 29% in 2025, and households with married couples declining from

¹ We focus on unmarried solo dwellers, rather than solo dwelling singles, due to measurement limitations the American Heritage Time Use Study (AHTUS) preventing us from distinguishing between unmarried individuals who are dating and who are not dating. We similarly limit our focus to respondents aged 19 to 65 due to the exclusion of younger and older age groups from the earliest sample of the AHTUS included in our analysis. Our analysis therefore omits a large and growing group of solo dwellers: those aged over 65 (Caplan & Rabe, 2023; Hemez et al., 2024).

² The “primary activity” refers to what the respondent was primarily doing during an episode of time. Examples of primary activities indicating phone- and digitally-mediated co-presence recorded by the American Heritage Time Use Study (AHTUS) include “talking on phone to girlfriend”, “texting with a friend”, and “Skyping with my sister” (U.S. Bureau of Labor Statistics and U.S. Census Bureau, 2018). While these primary activities directly indicate remote social engagement, there are other forms of remote social engagement that cannot be inferred from the primary activity or any other measure collected in the AHTUS, or more recent data collected via American Time Use Survey (ATUS). We discuss the implications of this limitation in our discussion section.

66% in 1975 to 47% in 2025 (U.S. Census Bureau, 2025)—and because we expect they have experienced steeper growth in social isolation relative to other groups.

Two potential mechanisms underlie this expectation. First, unmarried, solo dwelling people have a relatively high level of control over their time (DePaulo, 2023; Girme et al., 2023; Klinenberg, 2013). As solitary leisure has grown more alluring, particularly from technological developments, this group may have chosen to devote more time to such endeavors beyond what other groups are capable of. Second, as people's time has increasingly shifted towards the home (Sharkey, 2024) and away from shared public spaces (Finlay et al., 2019; Klinenberg, 2019), unmarried solo dwellers may have fewer opportunities to engage in co-present leisure relative to other groups.

In the sections that follow, we provide background information on social isolation, evidence of its growth, and further discussion of why social isolation during leisure is important to focus on. We then overview the two potential mechanisms that may lead to steeper growth in social isolation among unmarried solo dwellers relative to others. We then test our central hypothesis using the American Heritage Time Use Study (AHTUS) to assess growth in social isolation during leisure activities between 1965 and 2018. We focus on adults aged 19 to 65 to remain consistent with 1965 data. We examine this broad timespan to capture both recent eras and past eras that research examining the sociality of singlehood continue to draw from and reference, such as the 90s (Sarkisian & Gerstel, 2016), 80s (Moore, 1990), and 70s (Alwin et al., 1985; Fischer, 1982). No publicly available, representative U.S. dataset—including the AHTUS—contains the measures necessary to directly assess our proposed mechanisms or fully capture how people have come to interact with others, such as all instances of internet-mediated social interaction. We therefore conclude by discussing our findings and the need for time use researchers to embrace measures that better reflect the changing nature of people's social lives.

1.1 Social isolation and leisure

Social isolation associates with a range of negative health outcomes, including depression, loneliness (Ge et al., 2017; Jose & Lim, 2014; Kawachi, 2001), dementia (Shen et al., 2022), and heightened risk of mortality comparable to smoking, obesity, and physical inactivity (Holt-Lunstad et al., 2010, 2015; House et al., 1988). These and other outcomes have led to long-running concerns regarding its growth (Parigi & Henson, 2014; Putnam, 2001). At the same time, the experience of social isolation can be healthy (Long & Averill, 2003), and being with others can at times be detrimental (Hudson et al., 2020; Kahneman et al., 2004). Overall, the impact of social isolation on well-being is contextual (Hall & Merolla, 2020; Lam & García-Román, 2020; Rinderknecht et al., 2023; Roeters et al., 2014), and time diaries are well suited for focusing on the contexts where social isolation appears especially detrimental for well-being.

Time diaries record experiences across all 24 h of a day in multiple, sequential episodes—and when time diaries record social isolation, they typically do so by asking respondents if others were physically present during these episodes (Fisher, 2015). Such data offer a unique degree of detail and reliability for studying changes in daily behavior (Bonke, 2005; Fisher, 2015; Juster et al., 2003), and this research shows broad declines in daily, face-to-face social interaction. These declines have been reported in Canada from 1986 to 1998 (Clark, 2002) and among Canadian workers with a spouse or child between 1986 and 2005 (Turcotte, 2007); Norway between 1990 and 2010 (Vaage & Kitterød, 2012); Finland between 1987 and 2010 (Anttila et al., 2020); and in the U.S. from 2003 to 2013 (Robinson

et al., 2015), 2020 (Kannan & Veazie, 2023), and 2022 (Atalay, 2024; Sharkey, 2024). In the U.S., the percentage of the day spent alone increased from 43.5% in 2003 to 48.7% in 2019, then further increased to 49.7% in 2022 after falling slightly from its peak of 50.7% in 2020 (Atalay, 2024).³

In this article, we focus specifically on social isolation during leisure activities. Examples of leisure in this article include both sedentary (e.g., relaxing) and active (e.g., athletics) leisure, and both leisure mediated by technology (e.g., watching television) and typically not mediated by technology (e.g., religious activities and hobbies).

We focus on social isolation during leisure activities because (1) increases in time spent alone in recent decades have been concentrated within leisure relative to other daily activities (Anttila et al., 2020; Atalay, 2024; Clark, 2002; Kannan & Veazie, 2023) and because (2) time spent alone during leisure activities appears to be the most, or among the most, detrimental to well-being relative to time spent alone during other activities. Roeters et al. (2014), for example, assessed Dutch diary data and found that spending more leisure time alone (or a greater proportion of leisure time alone) was associated with worsened mental health, with mental health conceptualized by how often respondents experience indicators of depression and mental distress at the end of each day (ranging from “very often” to “seldom or never”). Greater time spent alone during housework was unrelated to mental health for women, though it was detrimental for men. Similarly, Lam and García-Román (2020) assessed diary data from older U.S. adults, and they found that time spent alone during leisure, eating and drinking, and (to a lesser extent) traveling associated negatively with happiness during these activities compared to time spent with others during these activities. Time spent alone was also positively correlated with sadness during leisure and eating and drinking. By contrast, doing housework alone was not associated with worse emotional well-being.

One explanation for the damaging effects of solitary leisure is that, ultimately, loneliness originates from people experiencing less social engagement than they desire (Peplau et al., 1982). Expectations for what adequate levels of social engagement look like are based partly on social comparisons which tend to inaccurately inflate the sociality of others (Deri et al., 2017; Feld, 1991; Peplau et al., 1982). Leisure spent alone, therefore, may at times be perceived as time spent missing out on others’ social activities, whether accurate or imagined. Further, beyond the context of daily life experiences, co-present leisure is useful for building relationships, and ultimately co-present leisure appears to be a valuable means for forming and maintaining social capital (Buz et al., 2014; Glover, 2018; Hall, 2019; Iso-Ahola & Park, 1996). Growth of solitary leisure is therefore a source of concern both due to its potential immediate effects and its effects across the life course.

1.2 Why unmarried solo dwellers may be growing disproportionately isolated

1.2.1 Increasing appeal of solitary leisure and the freedom to pursue it

Research on digital and social media express concern that healthy social interaction is being supplanted by solitary and potentially less meaningful media consumption (Parigi & Henson, 2014; Putnam, 2001; Turkle, 2011). Putnam (2001), for example, saw tech-

³ This analysis included all daily activities apart from time spent sleeping, engaging in personal time, and working. These activities were excluded due to the American Time Use Survey (ATUS) not collecting co-presence data during these activities in some (working) or all (sleep and personal time) years.

nological transformation undercutting opportunities for building relationships. Sander and Putnam (2009, p. 10) reiterated this sentiment later, describing the 90s as a time when people “increasingly watched *Friends* rather than had friends.” We expect that this concern applies most strongly to those who have the most flexibility in their time use choices, notably unmarried people—specifically, singles—and those living alone (DePaulo, 2023; Girme et al., 2023; Klinenberg, 2013).

This freedom and unstructured time may lead to solitary leisure even when co-present leisure could have been more enjoyable and beneficial for well-being. Bruni and Stanca (2008) provide three broad explanations for why people would pick solitary television consumption over leisure activities that may be more beneficial for well-being. Whereas social interaction requires effort to coordinate and typically requires an extended length of time, television consumption tends to be (1) mentally undemanding and therefore well-suited to relaxing; (2) available anytime of the day, for as long as desired; and (3) addictive. These explanations appear to apply well to newer forms of solitary leisure, especially given the on-demand nature of video streaming and the potential addictiveness of modern videogames (Zastrow, 2017). Overall, unmarried solo dwellers appear to have more flexibility than other groups to displace co-present leisure with solitary leisure and may increasingly choose to do so as solitary leisure becomes more desirable.

1.2.2 Diminishing social opportunities

The previous section focuses on the agency of unmarried solo dwellers, and it frames increases in social isolation as a choice these individuals might make when deciding what they would enjoy most. In contrast to this perspective, Hall and Liu (2022) highlight that it is unclear to what extent such choices are truly voluntary. Increased time spent on social media, for example, may to some extent be the consequence of increasing barriers to co-present social interaction rather than a consequence of the increasing desirability of social media. The lack of social opportunities may be particularly relevant to unmarried solo dwellers due to their reliance on a community potentially growing increasingly unavailable.

Relative to those living with others, the well-being of those living alone appears more dependent on neighborhood quality, including their community’s social support and social cohesion (Bromell & Cagney, 2014; Thompson & Krause, 1998). Consistent with this, singles report more frequent contact with and report receiving more help from non-spouse family, neighbors, and friends than do married individuals (Sarkisian & Gerstel, 2016). Similarly, unmarried people living alone report more contact with friends and confidants than do married people (Alwin et al., 1985). Yet, the social opportunities available in communities appear to be in decline in the U.S., as indicated by the decline of “third places,”—i.e., locations outside the home and work that provide people with opportunities to meet others and socialize, often spontaneously, and include coffee shops, bars, churches, and libraries (Finlay et al., 2019; Klinenberg, 2019; Oldenburg, 1999). As third places have declined, time spent in the home has expanded (Sharkey, 2024). Unmarried solo dwellers, by definition, lack opportunities for spontaneous co-present interaction in the home. This increase in time spent in the home paired with the broader decline in opportunities for spontaneous co-present interaction outside the home may lead to a disproportionate decline in in-person social opportunities for unmarried solo dwellers and therefore an increase in time spent engaging in solitary leisure.

1.2.3 Our hypothesis

Past research leads us to expect that unmarried solo dwellers will report more time in solitary leisure relative to other groups at any given timepoint (Anttila et al., 2020). Our two potential mechanisms lead to the additional expectation that the size of this difference will grow over time. Specifically, we hypothesize that:

Hypothesis: Unmarried solo dwellers will report more growth in solitary leisure between 1965 and 2018 relative to others, including married respondents and unmarried respondents who live with others.

2 Data and methods

We utilize six nationally representative U.S. time diary surveys collected in 1965–66 (referenced as 1965), 1975–76 (referenced as 1975), 1998, 2003, 2010, and 2018, and harmonized in the American Heritage Time Use Study (AHTUS) (Fisher et al., 2018). Each of the six time diary surveys we use in our analysis is an independent sample. These diaries were collected independent of each other until the beginning of the American Time Use Survey (ATUS) (Hofferth et al., 2020), which the AHTUS includes from 2003 to 2012 and 2018. We select 2010 as a convenient midpoint between 2003 and 2018. Using 2011 as an alternative midpoint produces substantively identical conclusions.

Time diaries are surveys designed to measure how respondents spend their time (i.e., in what activities) and the amount of time they spend in each activity type. Respondents report their time use by describing each activity they engaged in during the previous day, in sequence, and report contextual information about most activities, such as the presence of others. In each year, respondents reported activities by providing a verbatim description during each episode, which survey teams in each year then coded into specific standardized activity codings. The AHTUS standardizes these codings across datasets, ensuring that the activities considered leisure, for example, remain comparable over time. We exclude all diaries flagged as poor quality within the AHTUS (1,988 diaries in total) or diaries with missing data on any of our independent variables (126 diaries in total).⁴ We correct a small proportion of leisure activity episodes in which instances of reported isolation likely included others.⁵ For comparability with the 1965 data, our analyses only include respondents aged 19 to 65. In total, our primary analyses include data from 36,275 U.S. residents weighted to be nationally representative by age group and sex, and provide an even distribution of days of the week.

2.1 Outcome variables

Our primary outcome variable is time (i.e., daily minutes) spent engaging in leisure activities alone (i.e., solitary leisure). For each leisure activity reported in a diary, respondents indicated the presence of others, such as friends and family. We operationalize solitary lei-

⁴ See online supplement A for further sample and exclusion details.

⁵ See online supplement B for further information.

sure as engagement in leisure activities without the face-to-face presence of others and without the activity itself implying technologically-mediated co-presence, such as phone calls and video messaging.⁶ Leisure activities completed with the face-to-face presence of others are categorized as co-present leisure. Leisure activities implying remote co-presence are also categorized as co-present leisure, even if no one is reported as physically present.

Our definition of leisure includes nine broad categories, including (1) watching television / videos, (2) gaming, (3) computer use, (4) relaxing, (5) physical activities, which broadly include fitness, recreation, and sports-related activities, (6) reading, (7) hobbies, (8) religious activities, and (9) “other” leisure (i.e., activities capturing unspecified forms of leisure, activities which were reported too infrequently when alone to receive their own category, or activities we coded as always implying co-presence). Co-present leisure refers to these activities done in the presence of others. Total leisure refers to the combination of solitary and co-present leisure.⁷

2.2 Independent variables

Our demographic independent variables include respondents’ marital status/household composition (coded as: 0 = respondents other than unmarried solo dwellers, such as married respondents and unmarried respondents living with others,⁸ and 1 = unmarried solo dwellers), sex (coded as: 0 = male and 1 = female), race (coded as: 0 = non-White and 1 = White), employment status (coded as: 0 = unemployed or not in labor market and 1 = employed), age (coded as: 1 = 19–34, 2 = 35–49, and 3 = 50–65), and educational attainment (coded as 1 = high school & below, 2 = some college, 3 = college +).

2.3 Analytic approach

We aggregate together all episode-level data at the day level, capturing the total amount of time spent engaging in solitary leisure, co-present leisure, and total leisure across the entire diary day.

We begin with a descriptive analysis showing means and proportions for our key variables, followed by an OLS analysis of solitary leisure by year without control variables (Model 1). Next, we include adjustments for our demographic variables (Model 2). This model includes interaction terms between survey year and the unmarried solo dweller binary variable, allowing us to assess our hypothesis regarding how growth in solitary leisure differs for unmarried solo dwellers relative to others. Lastly, we conduct sensitivity analyses assessing how growth in solitary leisure relates to growth in leisure more generally.

⁶ See online supplement C for further discussion of how our definition compares to related research.

⁷ See online supplement D for an overview connecting these leisure categories to exact AHTUS activity codes and AHTUS coding limitations.

⁸ Unmarried respondents living with others includes unmarried individuals living with adults and/or own children under 18; 60% of these respondents live with own child/children under 18, 65% live with other adult(s), and 25% live with both own child/children under 18 and adult(s). It is important to note the significant growth in the cohabitation of unmarried romantic partners in more recent decades (Bloome & Ang, 2020; Di Giulio et al., 2019). Given that those categorized as unmarried and living with others has changed in ways that has not been consistently measured across all years of the AHTUS, we do not analyze this subgroup of unmarried individuals separately.

All analyses utilize survey weights provided in the AHTUS. Analyses including the 1975 data used clustering to account for the multiple diary responses from some respondents in these data. We also re-ran models presented in Table 2 after randomly selecting a single diary response for each respondent. Results were substantively identical.

3 Results

Table 1 provides an overview of our variables and how they change over time. As we discuss further in the next section, solitary leisure grew between 1965 and 2018 ($\Delta=61$, $p < .001$). Co-present leisure fell during this time period ($\Delta = -22$, $p < .001$), though total leisure increased by 40 min ($p < .001$) (see online supplement G for further information). The standard deviation for solitary leisure is also quite large, indicating high variability; some respondents spent a lot of time alone during leisure while others spent much less time alone during leisure, if any. Lastly, our primary independent variable of interest, unmarried solo dwellers, changed sharply over time, growing from 7% of our analytic sample in 1965 to 21% in 2010 and 2018.

Consistent with findings from related research, Model 1 in Table 2 shows that solitary leisure increased steadily between 1965 and 2018, from 58 min on average in 1965 to 119 min in 2018 (1965 vs. 1975: $\Delta=17$, $p < .001$; 1975 vs. 1998: $\Delta=12$, $p < .05$; 1998 vs. 2003:

Table 1 Descriptive statistics for analytic sample (proportion/mean (SD))

	1965	1975	1998	2003	2010	2018
<i>Time Use Variables (in minutes/day)</i>						
Solitary leisure	58 (79)	75 (115)	87 (135)	100 (147)	112 (160)	119 (173)
Co-present leisure	185 (148)	209 (167)	173 (167)	173 (165)	168 (169)	156 (165)
Total leisure	243 (161)	284 (182)	260 (201)	273 (195)	280 (203)	275 (204)
<i>Demographic Variables</i>						
Unmarried solo dwellers	0.07	0.14	0.16	0.16	0.21	0.21
Female	0.53	0.50	0.52	0.51	0.51	0.51
White	0.88	0.88	0.80	0.83	0.78	0.79
Employed	0.72	0.68	0.85	0.78	0.74	0.78
Age						
19–34	0.38	0.43	0.45	0.35	0.34	0.35
35–49	0.36	0.30	0.33	0.37	0.34	0.32
50–65	0.26	0.27	0.21	0.28	0.32	0.33
Education						
High school & below	0.73	0.69	0.37	0.39	0.35	0.28
Some college	0.15	0.17	0.29	0.21	0.21	0.19
College +	0.13	0.15	0.34	0.40	0.44	0.53
N _(diary)	1,959	3,638	902	15,785	9,805	6,611
N _(respondent cluster)	—	1,213	—	—	—	—

Results are weighted to be nationally representative of U.S. residents aged 19–65 by sex and age group. Note that the 1975 is unique because the AHTUS contains multiple observations per respondent. 1975 results cluster for 1,213 respondents. Time use variables are reported at the day level. Demographic variables are reported at the person level

Table 2 OLS regressions predicting number of daily minutes spent in solitary leisure, 1965–2018

		Model 1	Model 2
Year (Ref=1965)			
	1975	16.89*** (3.18)	8.26** (2.81)
	1998	28.94*** (5.11)	36.31*** (5.28)
	2003	42.29*** (2.24)	34.33*** (2.29)
	2010	53.81*** (2.55)	34.35*** (2.58)
	2018	61.50*** (2.96)	40.17*** (2.98)
Unmarried solo dwellers		—	60.73*** (9.23)
Year x Unmarried solo dwellers			
	1975	—	36.76** (13.21)
	1998	—	-3.86 (16.28)
	2003	—	49.21*** (10.09)
	2010	—	53.92*** (10.41)
	2018	—	77.56*** (11.12)
Female		—	-31.65*** (1.65)
White		—	-27.18*** (2.35)
Employed		—	-64.33*** (2.33)
Age (Ref=19–34)			
	35–49	—	11.14*** (1.74)
	50–65	—	49.58*** (2.12)
Education (Ref=High school & below)			
	Some college	—	-2.48 (2.30)
	College grad +	—	-14.58*** (1.83)
Constant		57.79*** (1.83)	125.54*** (3.72)
R^2		0.01	0.18

Standard errors are in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$, two-tailed.

$\Delta = 13$, $p < .01$; 2003 vs. 2010: $\Delta = 12$, $p < .001$; 2010 vs. 2018: $\Delta = 8$, $p < .01$). Further, consistent with other research, most of this growth in solitary leisure is concentrated in time spent watching television and video streaming.⁹

Figure 1 shows how solitary leisure increased among both unmarried solo dwellers and others between 1965 and 2018 while adjusting for demographic variables (unmarried solo

⁹ See online supplement E for further information regarding compositional changes in solitary leisure.

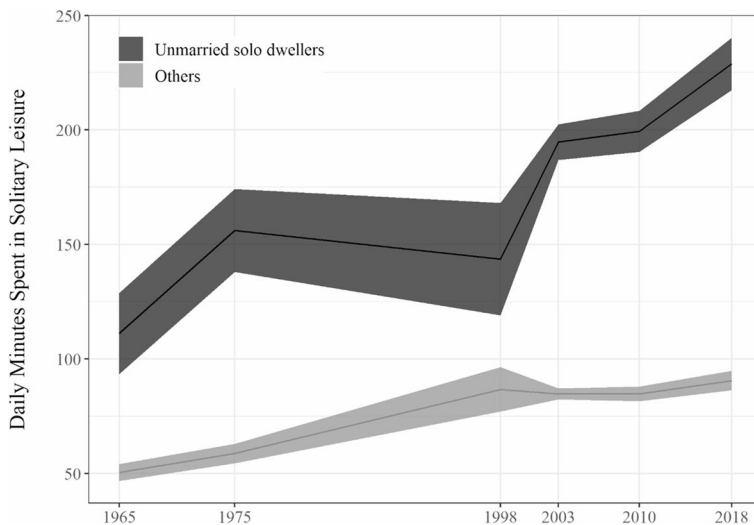


Fig. 1 Predicted changes in solitary leisure for unmarried solo dwellers and others. Bands are 95% CIs. Values are predicted based on model 2 in Table 2

dwellers: $\Delta = 118$ daily minutes spent in solitary leisure, $p < .001$; others: $\Delta = 40$, $p < .001$). As expected, solitary leisure grew more for unmarried solo dwellers ($118 - 40 = 78$, $p < .001$).

As a sensitivity check, we examine if growth of solitary leisure may be due to growth in leisure overall (Robinson et al., 2015; Robinson & Godbey, 1997). We find that time spent in total leisure grew for unmarried solo dwellers and others between 1965 and 2018 after adjusting for demographic changes between years. Adjusting for this overall growth in leisure does not substantively impact our findings. This overall growth also did not lead to consistent growth in co-present leisure during this time frame. Specifically, co-present leisure fell for unmarried solo dwellers ($\Delta = -41$, $p < .01$) and remained unchanged for others ($\Delta = -2$, *n.s.*) after adjusting for demographic changes.¹⁰ As an additional sensitivity check, we examine changes in solitary leisure by age group. Overall, changes in solitary leisure within each age group are consistent with the trends presented in Fig. 1.¹¹

4 Discussion

In this study, we find evidence of unequal growth in social isolation in American society, with unmarried solo dwellers aged 19 to 65 reporting significantly larger increases in solitary leisure relative to other respondents between 1965 and 2018. Our results provide some of the first evidence that daily life has not only grown more solitary, but that such growth has been especially pronounced for unmarried adults living alone.

¹⁰ See online supplement F for the model predicting solitary leisure while adjusting for total leisure. See online supplement G for models predicting co-present leisure and total leisure.

¹¹ See online supplement H for the models and figures broken down by age group.

As the prevalence of remaining unmarried has grown (Bloome & Ang, 2020), so too has the research community's attention on singlehood, its connection to well-being (Girme et al., 2023), and, more broadly, the possibility that it may be becoming a social identity similar to race, gender, and sexual orientation (Kislev, 2023). A primary takeaway from our analysis is that this growing literature should reference findings and data from past decades cautiously given that the daily lives of unmarried solo dwellers appear to be growing more solitary relative to others, and more recent data should be collected to validate past observations.

It is important to gain a better understanding of how problematic these changes in solitary leisure are for unmarried solo dwellers. We provided two potential mechanisms explaining why unmarried solo dwellers may be growing disproportionately isolated. A key difference between these explanations is agency. Choice, whether one is choosing to spend time with others or choosing to spend time alone, associates positively with well-being (Hall & Merolla, 2020; Uziel & Schmidt-Barad, 2022). The extent to which the disproportionate growth in solitary leisure among unmarried solo dwellers is a problem for well-being may partly depend on the extent to which this change is driven by our second mechanism—the absence of social opportunities. Further, such choice may vary both between subgroups of unmarried solo dwellers and within unmarried solo dwellers, across moments in time. Future time use research should incorporate direct measures of perceived choice to better identify those for whom social isolation is most problematic, and when it is most problematic. And lastly, researchers should consider shifting definitions in what people believe leads to happiness. As solitary leisure becomes more prevalent, negative perceptions of solitary leisure may diminish, and the experience of solitude may therefore become more positive over time. Consistent with this perspective, research has found that having more positive beliefs about being alone associates with experiencing less loneliness while alone (Rodriguez et al., 2025).

4.1 Limitations

The central limitations of the present study are the descriptive nature of our data, the absence of measures that could indicate if changes in social isolation associate with respondents' well-being, and the absence of measures fully capturing remote social engagement. Crucially, future diary research must expand its conception of social interaction to better reflect the varied ways people use internet-connected technologies (ICTs) to interact with others. ICTs provide a convenient means for maintaining connections despite geographic distance (Rainie & Wellman, 2012; Vanden Abeele et al., 2018) and may positively impact social connectedness (Valkenburg & Peter, 2007; Wang & Wellman, 2010). Yet, the allure of television and ICTs may also compete with and, at times, displace face-to-face interaction (Robinson & Godbey, 1997; Turkle, 2011; Vanden Abeele et al., 2018; Vilhelmson et al., 2018), though this relationship remains unclear (Hall & Liu, 2022). The AHTUS, although valuable for providing the only U.S. dataset of time diaries spanning six decades, has two limitations that prevent us from fully exploring such displacement as it relates specifically to ICTs. The first limitation relates to how the AHTUS conceives of what it means to be alone. When directly measuring the presence of others, the AHTUS only focuses on face-to-face co-presence and is therefore missing social interaction mediated by technology

despite its potential increasing prevalence as a source of connection. Second, the AHTUS records some activities that allow researchers to indirectly infer remote co-presence, but this is only a subset of all remote co-presence people experience. Some activities implying remote co-presence may never be reported at all, since they occur during other activities (i.e., they function as “secondary” activities) rather than being central enough to report as their own activity. Diaries designed to capture this secondary device usage report almost three hours of such usage a day in 2015 in the U.K., compared to about a half hour of time spent using computers as a main activity in 2015 the U.K. (Gershuny & Sullivan, 2019). However, of the years examined in our article, the AHTUS only provides a secondary measure of computer use in 1998. Much usage of technology for social interaction is therefore likely missing from the AHTUS.¹² Future explorations of solitary leisure and social isolation more generally should, if possible, concentrate on the potential compensatory role of remote social interaction among unmarried individuals living alone, especially in light of the potential inferiority of such interaction for supporting well-being (Sherman et al., 2013). To do so, these studies should include direct measures of remote co-presence (Fisher, 2015; Rinderknecht et al., 2022).

In sum, our study provides new insights into the disproportionate growth of solitary leisure among unmarried solo dwellers relative to others. It extends related research focusing on other subgroups, and it highlights the need for research focused on singles and those living alone to consider the changing lives of these individuals. It is, however, an incomplete picture of the daily lives of unmarried solo dwellers; a fuller understanding of their lives will require better measures. We therefore conclude by identifying the specific ways time use researchers should develop future instruments to better capture our changing social lives and their intersections with technology.

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Data Availability The data used for this study are publicly available. They can be accessed here: <https://www.ahtusdata.org/ahtus/>.

Declarations

Conflict of interest We have no conflicts of interest to report.

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¹² Although secondary computer usage on its own is not sufficient for identifying remote co-presence, more specific secondary measures may be fruitful. For example, these measures could capture secondary social media usage and further measure how “actively” or “passively” respondents use social media. Active usage of social media could be interpreted as remote co-presence (Verduyn et al., 2015).

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