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Beyond material poverty: Why time poverty matters for individuals, organisations, and nations

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ABSTRACT

Over the last two decades, global wealth has risen. Yet, material affluence has not translated into time affluence. Instead, most people today report feeling persistently “time poor”—like they have too many things to do and not enough time to do them. This is critical because time poverty is linked to lower well-being, physical health, and productivity. For example, in our analysis of 2.5 million Americans, subjective feelings of time poverty had a stronger negative effect on well-being than being unemployed. However, individuals, organisations, and policymakers often overlook the pernicious effects of time poverty. Billions of dollars are spent each year to alleviate material poverty, while time poverty is often ignored or exacerbated. In this Perspective, we discuss the organisational, institutional, and psychological factors that explain why time poverty is often under appreciated. We argue that scientists, policymakers, and organisational leaders need to devote more attention and resources toward understanding and reducing time poverty to promote psychological and economic well-being.

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Human beings have always faced resource constraints driven by crises such as plagues, famine, and drought. Consistent with our species' struggle to obtain enough tangible assets to survive, policy decisions have primarily focused on increasing material prosperityⁱ. Historically, this focus has been driven by the general belief that material wealth results in greater welfare^{ii,iii} – a perspective that is exemplified by the fact that the Gross Domestic Product has been used as the primary tool for measuring country-level welfare since its development in 1934^{iv}.

More recently, however, this narrow focus on material resources has been challenged^{v,vi}. In the 1970s, the economist Richard Easterlin discovered a paradox – while economic growth in the US had steadily increased over the previous decades – citizens' level of happiness had remained largely unaltered^{vii}. Debated by some scholars^{viii,ix}, the “Easterlin Paradox” was confirmed in recent years and across countries^{x,xi,xii}. Following from these findings, policymakers have come to recognise that non-monetary factors, such as societal trust and optimism, are also critical in shaping citizens' well-being and societal progress^{xiii,xiv,xv}. In this Perspective, we argue that policymakers also need to consider the role of *time affluence*. Although wealth has risen around the world, material prosperity has not translated into an abundance of time; on the contrary, rising wealth often exacerbates feelings of *time poverty*^{xvi}.

Defined as the chronic feeling of having too many things to do and not enough time to do them^{xvii,xviii}, time poverty is increasing in society. Data from the Gallup US Daily Poll – a nationally representative sample of US residents shows that, in 2011, 70% of employed Americans reported that they “never had enough time,” and in 2018, this proportion increased to 80%^{xix}. Coinciding with these societal trends, researchers across academic fields have started to systematically study this phenomenon. In social psychology, a growing literature finds that people who are more time affluent experience greater psychological well-being^{xx,xxi,xxii}. Organisational behaviour research documents the role of workplace structures in shaping how people think about and use their time^{xxiv,xxv,xxvi}. Legal scholars are starting to consider the full welfare costs of the time burdens imposed by social structures (i.e., unpaid labour burdens incurred by women) and government processes (i.e., paperwork and administrative

burdens^{xxviii}). Political theorists are urging scholars to study wasted time in political institutions, such as how wait-times at voting booths or in court influence democratic processes^{xxix}.

Developmental economists are advocating for the systematic study of time use and associated stressors among the working poor^{xxx,xxxi}. The common thread across these diverse disciplines is that time poverty may be as important as material poverty in shaping human welfare.

Today, time poverty and ‘busyness’ are often seen as signals of productivity, success, and high status^{xxxiii,xxxiv}. Yet, recent scientific evidence provides compelling evidence that feeling time-poor can adversely affect subjective well-being (e.g., life satisfaction, positive affect), mental health, work performance, creativity, and relationship quality (see Table 1 for the documented, negative consequences of time poverty). Building on this work, the aim of the current paper is to analyse the causes of time poverty and discuss potential solutions.

First, we focus on the institutional, organisational, and psychological factors that contribute to time poverty at work and outside of it. In doing so, we provide an explanation for why policymakers, companies, and individuals tend to overlook or exacerbate time poverty.

Second, we discuss the potential role of social scientists, policymakers, and organisational leaders in reversing the upward trend in time poverty worldwide.

Organisational and Institutional Drivers of Time Poverty

Organisations, governments, and NGOs inadvertently, and sometimes intentionally, cause their constituents to feel time-poor. In private and public organisations, there are two core structural sources of time poverty.

First, organisations often create unnecessary “idle time,” defined as involuntary periods of downtime when employees cannot perform their work tasks. According to a recent investigation with over 1,000 employees across 29 occupations, including lawyers, managers, and soldiers, more than 78% of employees reported that they were kept idle between meetings, assignments, and other responsibilities^{xxxv}. These idle hours resulted in the equivalent of over \$100 billion a year in lost wages. Furthermore, when employees anticipated experiencing idle time, they also slowed down the pace of their work. This is because people dread idleness^{xxxvi}

and boredom^{xxxvii,xxxviii}. Relatedly, organisations are increasingly wasting employees' time with menial administrative tasks that are not central or necessary to primary roles at work^{xxxix}. In a nationally representative survey of 4,720 US physicians, the average doctor spent 8.7 hours per week on administrative tasks such as billing and record keeping, and these time burdens have increased by 20% in the last ten years^{xl}. According to a detailed set of qualitative interviews^{xli}, even CEOs of well-established organisations who have control over their schedules spent only 43% of time engaged in activities "directly related to furthering their mission." When engaged in secondary tasks, employees are reminded of all the central tasks they could be doing, increasing their feelings of goal conflict, and in turn, their feelings of time poverty^{xlii}.

Second, organisations fragment employees' time by imposing various meetings and social obligations. Results from a detailed study with American office workers revealed that a typical workday consists of 88 "episodes" that last 10 minutes or less¹, on average^{xliii}. Task switching and interruptions increase time poverty because they undermine employees' sense of control over their time^{xliv}. Employees' coping tactics are often counterproductive, as employees tend to speed up their work pace, shortening the time they spend on any one activity, or engage in multitasking^{xlv}. In turn, these strategies tend to further increase feelings of time poverty and undermine productivity^{xlvi,xlvii}. For example, fragmented time undermines performance because of an "attentional residue" that carries over from one task to another: employees need time to stop thinking of one task before they can fully shift their attention to the next^{xlviii}.

Governments also contribute to time poverty in two primary ways. First, to receive necessary permits, licenses, tax deductions, subsidies, educational assistance, and health benefits, citizens must fill out forms, travel to government offices, and wait in lines. Recognising the potential welfare costs, in 1980, the United States Congress passed the Paperwork Reduction Act to constrain the accumulation of administrative paperwork requirements imposed on citizens and

¹ In this study, 'episodes' are defined as switching from one work task to another, either because the individual worker chose to switch tasks or because they were interrupted by an email alert, phone call, colleague, or some other work obligation.

businesses. This act was then amended in 1995, placing even greater emphasis on the need to reduce paperwork inefficiencies. Despite such initiatives, paperwork burdens have worsened. In 2015, federal government paperwork demands cost US citizens 9.78 billion hours^{xxviii} or the equivalent of \$215 billion a year in lost wages. In 2019, the US Office of Information and Regulatory Affairs (OIRA)—the agency that oversees the implementation of governmental regulations—estimated that paperwork burdens had grown to 11.6 billion hours^{xlix}.

Independent evaluations of government economic programs indicate that the burden of administrative paperwork is disproportionately placed on the poor, harming the very people these programs are intended to help^l. For example, low- and middle-income citizens who are eligible to obtain the Earned Income Tax Credit are required to fill out long, complex application forms and to provide numerous documents, such as records of all of their expenses (e.g., rent and groceries). Similarly, to receive Medicaid, families have to complete arduous eligibility paperwork that can range from 24 to 31 pages in length. Many families do not have the time to fulfil all these requirements and end up missing out on benefits for which they are eligible. Data from the State Children’s Health Insurance Program shows that 24% of Medicaid re-enrolment applications were denied due to incorrect paperwork^{li}.

Second, citizens face increasingly long commute times^{lii}. Globally, employees spend an average of 300 hours each year traveling between work and home. This represents roughly 10% of their total working time^{liii,liv}. Similar to paperwork burdens, commute times are not equally distributed across the income spectrum. Census data conducted by the District of Columbia’s Office of Revenue Analysis shows that the commute time for low-income working adults is 120 minutes more per week than the commute time of higher paid workers^{lv}. Governments tend to exacerbate these differences because they fail to provide affordable housing options in city centers, where most jobs are located^{lvi,lvii}. Longer commute times reduce the amount of time available to search for better employment^{lviii,lix}, complete non-work activities^{lx}, and are associated with lower levels of social capital,^{lxi} physical health^{lxii,lxiii}, and life

satisfaction^{lxiv}. In one study with 3,409 Canadian citizens, more time spent commuting was also associated with greater feelings of time poverty^{lxiv}.

The evidence outlined above illustrates the types of organisational and institutional factors that increase feelings of time poverty. In the next section, we argue that there are also psychological factors that impede people from recognising time as an important resource. These factors could help to explain why time poverty is often neglected and exacerbated by policymakers as well as organisational and non-profit leaders.

Psychological Drivers of Time Poverty

First, relative to money, people tend to undervalue their time^{lxv}. Across six studies with 4,690 respondents, Whillans, Weidman, and Dunn^{lxvi} found that only 48% of respondents indicated a preference for having more time, rather than more money. This effect held even for the most time-poor individuals in the sample: working parents with young children living at home. The tendency to undervalue time is also apparent when experts are making decisions on behalf of others. In a pilot study, West and Whillans^{liii} asked thirty current and aspiring policymakers from the Harvard Kennedy School of Public Policy how they would allocate 2,100 Kenyan shilling to improve the welfare of working women living in Kibera, Africa. Only 6% of respondents spontaneously reported that they would use the money to save women time. When respondents explicitly chose between three policy programs (an unconditional cash transfer program, an in-kind goods program, or a time-saving program), only four respondents (13%) selected the time-saving program; 87% chose cash. Thus, time poverty might be neglected because people tend to pay more attention to material resources than time-related resources.

Second, people are less sensitive to small losses of time relative to money. For example, Festjens et al.^{lxvii} found that people become more sensitive to losses of time compared to money when the amounts are large (12 months vs. \$18,000). Yet, when the amounts are small, people become less sensitive to losses of time (60 minutes vs. \$12). This research suggests that people tend to pay attention to time costs only when these costs are large, which might explain why time poverty can go unnoticed on a daily basis—potentially accumulating across days.

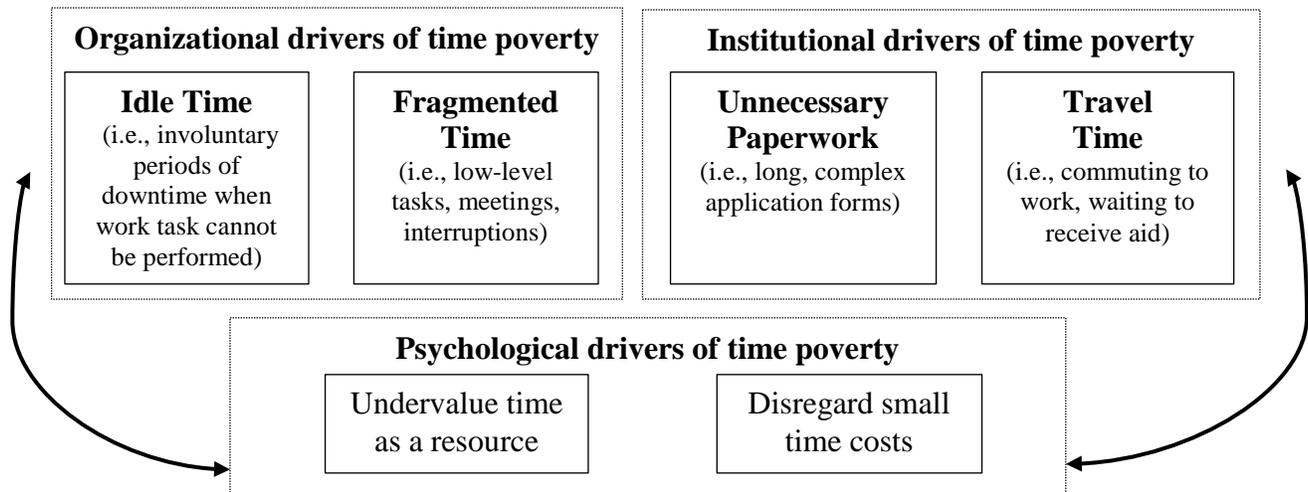


Figure 1. *The reinforcing nature of the drivers of time poverty*

These two psychological factors help to explain why institutions and organisations systematically waste time. Indeed, the tendency to undervalue time could explain why organisations often fail to address idle time or the increased fragmentation of individuals' time. Similarly, because people are relatively insensitive to small losses of time, policymakers and aid organisations might fail to address the accumulation of small administrative burdens over time. Institutional and organisational factors could reinforce these psychological factors, resulting in a vicious circle (See Figure 1).

Overall, a better understanding of why time poverty accumulates and how to alleviate it could promote individual and societal well-being. Reducing time poverty could also promote economic mobility, which has been consistently declining in the United States over the last 70 years^{lxviii}. We argue that reducing time poverty could enable individuals from all walks of life and socio-economic backgrounds to devote more effort and attention to their health, work, their families, and community. Time affluence could increase resilience to stressors and free mental resources necessary to make more prudent financial decisions^{lxix}. Thus, alleviating time poverty might be a viable path towards helping people lift themselves out of material poverty^{lxx, lxxi, lxxii}.

In the next section, we discuss critical steps that social scientists should take to enriching our understanding of time poverty—a topic that we believe deserves its own investigation.

Time Poverty: Next Steps

At a *conceptual* level, time poverty as a psychological construct requires further clarification. Scholars have used a myriad of definitions. Some definitions of time poverty focus on the quantity of working hours, others have focused on the subjective aspects of time poverty, and some involve a combination of the two (Table 1). Beyond these definitions, time poverty might have different effects depending on whether people feel like they do not have enough time to complete activities that they *want* to do (e.g., social gatherings) or activities they *have* to do (e.g., work projects)^{lxxiii}. A clearer conceptualisation of the experience of time poverty across different tasks and domains (e.g., home vs. work^{lxxiv}) could inform the design of interventions aimed at reducing time poverty as a general feeling and within specific domains of one's life.

At the *methodological* level, there is a need to develop more reliable and accurate measures of time povertyⁱ. A great deal of progress has been made to study how people objectively spend their time. In the social sciences, the Day Reconstruction Method (DRM) is the gold standard to assess how people spend their time. The DRM involves asking people to systematically reconstruct their activities and experiences of the preceding day with procedures that reduce recall bias^{lxxv}. By contrast, less progress has been made in capturing the subjective value of time. Existing measures tend to rely on hypothetical scenarios or self-reports instruments that bear little resemblance to the trade-offs people face in their day-to-day lives. In an effort to address this limitation, scholars^{lxxvi} have started to develop incentive compatible behavioural measures of the value of time. These measures involve sending text messages that prompt participants with a randomised time commitment and payment amount, asking participants whether they accept or decline the task. The wage people are willing to accept signals the underlying value of time. More wide-scale use of these and related incentive compatible measures would not only capture time-value more accurately but would also help validate the great deal of research that relies on self-reported measures of the value of time.

Future measures of time poverty should also reflect the dynamic underlying dimensions of time poverty—that include both objective time-use and subjective value of time

simultaneously—typically measures either focus on one or the other dimension (see Williams et al. [Error! Bookmark not defined.](#) for a discussion on the need to create multidimensional poverty measures). Having the proper measures to quantify time poverty are essential for creating actionable steps to tackle it.

At the *empirical* level, social scientists should focus on collecting time poverty in more representative samples. Similar to most behavioural science research, the majority of research on this topic has been conducted with W.E.I.R.D samples (Western, Educated, Industrialised, Rich, and Democratic¹). Future research on time poverty would greatly benefit from surveying people within diverse socio-economic and cultural contexts. In particular, existing data on time poverty are especially scarce in developing countries, and in low socio-economic status communities in developed countries^{xxx}. These populations are of particular interest because they tend to be both time-poor and materially poor^{xxx,1}. In Sub-Saharan Africa, for example, women spend an average of 4.2 hours per day on unpaid work, like cleaning and cooking, and in India, women spend up to 6 hours per day¹. As a result, poor women have less time available to participate in paid labour and invest in the development and well-being of themselves and their children. Time poverty further prevents girls from attending school. In Bangladesh, girls from poor families living in rural areas spend up to 10 hours per day collecting enough water for their homes and their family's crops. There are also health-related consequences, such that objective lack of time is associated with constraints on cognitive resources^{lxxvii}. These data illustrate the tremendous value of addressing time poverty among non-WEIRD individuals who are also materially poor.

Along with gathering data across nations, we argue that it is also important to collect data within nations from populations that are exposed to extreme time-based experiences. For example, scholars could focus on capturing time poverty among people in the top 1% of income earners, those whose occupations require working extremely long hours (e.g. physicians, CEOs, and truck drivers), as well as irregular or unpredictable hours (e.g., retail workers in developed countries or casual laborers in developing countries), and those who work few or no hours (e.g.

retirees and the unemployed). These investigations would further the understanding of how objective factors—like the structure of one’s work—shape subjective time poverty^{lxxviii}.

Overall, the literature on time poverty as a psychological phenomenon is in its infancy. Nevertheless, we argue that policymakers and organisational leaders can already begin to tackle time poverty. For example, a straightforward step towards alleviating time poverty is to ensure that time burdens are adequately quantified. In developed countries such as the United States, there are institutions that already collect information on the time burdens associated with administrative programs and regulations (i.e., OIRA^{lxxix}). However, most state and municipal governments have not enacted similar initiatives. Thus, a significant portion, perhaps the majority, of the total administrative burdens imposed on citizens are unaccounted for. At the country-level, policymakers could consider developing a time poverty GINI index, for example. This index would capture the statistical dispersion of feelings of time poverty at the national and local level, serving as a unique indicator of inequality along with the Gini coefficient.

Concluding remarks

Existing research and policy efforts have focused on the consequences of tangible forms of poverty (i.e., material poverty) rather than time poverty. As we have argued, time poverty is a threat to well-being and economic development that often goes unnoticed—among HR leaders, policymakers, and citizens alike. This pervasive and problematic phenomenon deserves the attention of society and scientists—to the same extent as financial poverty.

Table 1*A brief overview of the documented consequences of time poverty*

Reference	Context	N	Definition of time poverty	Outcomes	Effect size		
Zuzanek, J. (2004). Work, leisure, time-pressure and stress. In Haworth J. T. & Veal A. J. (Eds.) <i>Work and Leisure</i> . New York: Routledge, 123–44.	Canada	10,748	Feelings of time pressure (composite index of 12-items; e.g., “Compared to five years ago, do you feel more rushed, about the same, or less rushed?”; range: 0–100)	Job satisfaction (1 = <i>very dissatisfied</i> to 4 = <i>very satisfied</i>)	$r = -.20^*$		
				Life satisfaction (1 = <i>not too happy</i> to 3 = <i>very happy</i>)	$r = -.28^*$		
				Work-family balance satisfaction (0 = <i>dissatisfied</i> to 1 = <i>satisfied</i>)	$r = -.38^*$		
				Satisfaction with non-working time (1 = <i>very dissatisfied</i> to 4 = <i>very satisfied</i>)	$r = -.37^*$		
				Perceived psychological stress (1 = <i>almost none</i> to 4 = <i>a lot</i>)	$r = .49^*$		
				Self-assessed health (“Compared to other people of your age, how would you describe your state of health?”; 1 = <i>poor</i> to 5 = <i>excellent</i>)	$r = -.13^*$		
				Satisfaction with health (1 = <i>very dissatisfied</i> to 4 = <i>very satisfied</i>)	$r = -.20^*$		
				Sleep quality (e.g., “Do you regularly have trouble going to sleep or falling asleep?”; 1 = <i>yes</i> ; 0 = <i>no</i>)	$r = .19^*$		
				17,626	Feelings of trying to take on too many things at once (scale: 1: <i>yes</i> vs. 0 = <i>no</i>)	Job satisfaction (1 = <i>not at all satisfied</i> to 4 = <i>very satisfied</i>)	$r = -.05^*$
						Feeling happy (e.g., “Would you describe yourself as being usually?” 1 = <i>so unhappy that life is not worthwhile</i> to 4 = <i>happy and interested in life</i>)	$r = -.05^*$
Self-assessed health (e.g., “In general, would you say your health is:” 1 = <i>poor</i> to 5 = <i>excellent</i>)	$r = -.07^*$						
Self-assessed mental health (e.g., During the past month, about how often did you feel so sad that nothing could cheer you up?”; 1 = <i>none of the time</i> to 5 = <i>all of the time</i>)	$r = -.15^*$						
Use of antidepressant drugs (e.g., “In the past month, dhow many anti-depressants did you take?”	$r = .06^*$						
Lehto, A-M. (1998) Time pressure as a stress factor.	Finland	2,979	Feelings of time pressure (defined by the presence of	Headache (occurrence per month)	48% of respondents		

Yan, L. L., Liu, K., Matthews, K. A., Daviglius, M. L., Ferguson, T. F., Kiefe, C. I. (2003). Psychosocial factors and risk of hypertension: the coronary artery risk development in young adults (CARDIA) study. <i>JAMA</i> , 290, 2138–2148	United States	3,308	Feelings of time urgency/impatience (e.g. feeling pressured for time in general, feeling pressured at the end of an average work or housework day, eating too quickly, and getting quite upset when having to wait for anything; 0 = low, 1 = medium-low, 2 = medium-high, 3–4 = high)	Hypertension incidence (percentage of non-hypertensive participants at year 0 or year 5 who developed hypertension at year 15; hypertension defined as systolic blood pressure of at least 140 mm Hg, diastolic blood pressure of at least 90 mm Hg, and use of anti-hypertensive medication)	$OR_{\text{medium-low time urgency/impatience}} = 1.51$ $OR_{\text{medium-high time urgency/impatience}} = 1.47$ $OR_{\text{high time urgency/impatience}} = 1.84$
Vuckovic N. (1999). Fast relief: buying time with medications. <i>Medical Anthropology Quarterly</i> , 13, 51–68.	United States	40	Feelings of not having enough time (definition based on interviews conducted in households in the United States)	Use of medication to cope with demands and avoid visits to doctors observed over an 18-month period	Increased
Roxburgh, S. (2004). There just aren't enough hours in the day: The mental health consequences of time pressure. <i>Journal of Health and Social Behavior</i> , 45(2), 115–131.	United States	790	Subjective experience of time pressure (e.g., "In the last twelve months how often have you felt like you never seem to have enough time to get everything done?" 1 = strongly disagree to 4 = strongly agree)	Depression (frequency of experiencing various symptoms; e.g., "you had trouble keeping your mind on what you were doing"; 1 = rarely/none of the times, 2 = some or a little of the time; 3 = occasionally or a moderate amount of time; 4 = most or all of the time)	$\beta_{\text{women}} = .37^{***}$ $\beta_{\text{men}} = .37^{***}$ $\beta_{\text{overall}} = .41^{***}$
Teuchmann, K., Totterdell, P., Parker, S. K. (1999). Rushed, unhappy, and drained: an experience sampling study of relations between time pressure, perceived control, mood, and emotional exhaustion in a group of accountants. <i>Journal of Occupational Health Psychology</i> , 4(1), 37 – 37.	United Kingdom	254	Subjective experience of time pressure (visual analogous scale from 0 = no experience to ++ = maximum experience; 20 possible positions)	Perceived control at work (e.g., extent to which participants felt in control of their current situation)	$\beta = -.17^{**}$
				Emotional exhaustion (e.g., extent of feeling emotionally drained by work and feeling burned out from work)	$\beta = .19^{***}$
				Negative mood (e.g., extent of feeling very sad, very drowsy)	$\beta = .27^{***}$

				All outcome variables were measured using a visual analogous scale from 0 = <i>no experience</i> to ++ = <i>maximum experience</i> ; 20 possible positions	
Dugan, A. G., Matthews, R. A., & Barnes-Farrell, J. L. (2012). Understanding the roles of subjective and objective aspects of time in the work-family interface. <i>Community, Work and Family</i> , 15(2), 149–172.	United States	289	Feelings of not having enough time to do one’s work (e.g. item: “There is just not enough time to do my work”; 1 = <i>strongly disagree</i> to 7 = <i>strongly agree</i>)	Work-to-family conflict (e.g., items: “I came home from work too tired to do some of the things I wanted to do”; 1 = <i>never</i> to 7 = <i>most of the time</i>)	$\beta = .30^{**}$
				Family-to-work conflict (“I was too tired to be effective at work because of things I had to do at home”; 1 = <i>never</i> to 7 = <i>most of the time</i>)	$\beta = .09$ (<i>ns</i>)
				Number of work hours (“How many hours do you typically work in a week?”)	$\beta = .20^{**}$
				Turnover intentions (“How likely is it that you will look for a job outside of this organisation during the next year?”; 1 = <i>very unlikely</i> to 7 = <i>very likely</i>)	<i>i.e.</i> = $.09^{**}$
				Self-assessed health (“In general, would you say your health is”; 1 = <i>poor</i> to 5 = <i>excellent</i>)	<i>i.e.</i> = $-.06^{**}$
				Perceived work performance (“Overall, how would you rate your work performance?”; 1 = <i>poor</i> ; to 5 = <i>excellent</i>)	<i>i.e.</i> = $-.03$ (<i>ns</i>)
				Feelings of not having enough time to complete family responsibilities (e.g. item: “I have to rush in order to complete my family responsibilities and chores”; 1 = <i>strongly disagree</i> to 7 = <i>strongly agree</i>)	
			Work-to-family conflict (same scale as above)	$\beta = .27^{**}$	
			Family-to-work conflict (same scale as above)	$\beta = .46^{**}$	
			Number of family hours (“How many hours a week do you typically spend doing household related chores (things like cooking, cleaning, repairs, shopping, yard work, and keeping track of money and bills)?”) (same scale as above)	$\beta = .16^{**}$	
			Turnover intentions (same scale as above)	<i>i.e.</i> = $.08^{**}$	
			Self-assessed health (same scale as above)	<i>i.e.</i> = $-.11^{**}$	
			Perceived work performance (same scale as above)	<i>i.e.</i> = $-.13^{**}$	

Kleiner, S. (2014). Subjective time pressure: General or domain specific? <i>Social Science Research</i> , 47, 108–120.	United States	659	Feelings of not having enough time to do all the tasks one needs to do at work (“In general, how do you feel about your time – would you say you always feel rushed even to do things you have to do, only sometimes feel rushed, or almost never feel rushed? 1 = <i>never</i> , 2 = <i>sometimes</i> , 3 = <i>always</i>)	Trouble concentrating at work (“I have found it difficult to concentrate at work because of my family responsibilities?”; 1 = <i>never</i> , 2 = <i>sometimes</i> , 3 = <i>always</i>)	$\beta = .13^{**}$
				Self-rated stress at work (“My job is rarely stressful”; 1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>)	$\beta = .33^{***}$
				Self-rated stress at home (“My life at home is rarely stressful”; 1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>)	$\beta = -.02$ (<i>ns</i>)
				Feelings of not having enough time to do all the tasks one needs to do at home (“There are so many things to do at home, I often run out of time before I get them all done”; 1 = <i>strongly disagree</i> to 5 = <i>strongly agree</i>)	Trouble concentrating at work (same scale as above)
				Self-rated stress at work (same scale as above)	$\beta = .20^{***}$
Amabile, T. J., Mueller, J. S., Simpson, W. B., Hadley, C. N., Kramer, S. J., & Fleming, L. (2002). <i>Time pressure and creativity in organizations: A longitudinal field study</i> (No. 2–73).	United States	177 (8,910 daily observations)	Daily perceived time pressure at work (e.g., “I feel a sense of time pressure in my work” 1 = <i>never or almost never true</i> to 4 = <i>always or almost always true</i>)	Daily creative cognitive processing (dichotomous: 1 = <i>yes if participants’ daily event description mentioned having had a cognitive creative event</i> ; 0 = <i>no mention of such event</i>)	$Beta = -.10^{**}$
Strazdins L, Welsh J, Korda R, Broom D, Paolucci F (2016). Not all hours are equal: could time be a social determinant of health? <i>Social Health Indicators</i> , 38, 21-42.	Australia	9,177	Feelings of always rushing (“How often do you feel rushed or pressed for time?”; 0 = <i>rarely rushing</i> , 1 = <i>often rushing</i> ; 3 = <i>always rushing</i>)	Physical inactivity (frequency of exercising moderately or intensely for at least 30 minutes; 0 = <i>not at all, less than once a week</i> ; 1 = <i>one to two times a week</i>)	$OR_{often\ rushing} = 1.44$ $OR_{always\ rushing} = 1.48$
				Self-assessed health (“In general, would you say your health is excellent, very good, good, fair or poor?”; 0 = <i>poor, fair health</i> , 1 = <i>good, very good, or excellent health</i>)	$OR_{often\ rushing} = 1.83$ $OR_{always\ rushing} = 3.15$

				Self-assessed mental health (e.g., “How often over the previous 4 weeks did you feel: Tired out for no good reason”; 1 = <i>none of the time</i> to 5 = <i>all of the time</i>)	$OR_{often\ rushing} = 3.18$ $OR_{always\ rushing} = 5.11$
Garling T, Gamble A, Fors F, Hjerm M. (2016). Emotional well-being related to time pressure, impediment to goal progress, and stress-related symptoms. <i>Journal Happiness Studies</i> , 17, 1789-1799.	Sweden	1,507	Feelings of not having enough time to do one's work (“I frequently feel that I don't have enough time to complete my job assignments”; 1 = <i>do not agree at all</i> ; 7 = <i>completely agree</i>)	Emotional well-being (“How would you say you typically have felt last month?”; 3-bipolar adjective scales from 0 to 10; e.g., 0 = <i>very sad, displeased, depressed</i> to 10 = <i>very glad, pleased, happy</i>)	$r = -.17^{***}$
			Feelings of not having enough time to enjoy leisure (“I frequently feel that I don't have enough time to do what I want to do in my leisure time”; 1 = <i>do not agree at all</i> ; 7 = <i>completely agree</i>)	Emotional well-being (same scale as above)	$r = -.20^{***}$
			587	Feelings of not having enough time (e.g., “I frequently feel I do not have sufficient time”; 0 = <i>do not agree at all</i> to 6 = <i>completely agree</i>)	Emotional well-being (frequency of emotions experienced at work and off work over the past month; 0 = <i>never</i> to 6 = <i>always</i> ; created index from -6 to 6)
				Perceptions of goal progress (e.g., “I frequently fail to reach goals I set”; 0 = <i>do not agree at all</i> to 6 = <i>completely agree</i>)	$B = .34^*$
				Frequency of stress-related symptoms (frequency of experiencing headaches, musculoskeletal pains, gastrointestinal problems, sleep disturbances, and anxiety over the last year; 0 = <i>never</i> to 7 = <i>daily</i>)	$B = .28^*$
Whillans, A. V., Dunn, E. W., Smeets, P., Bekkers, R., & Norton, M. I. (2017). Buying time promotes happiness. <i>Proceedings of the National Academy of</i>	Canada	326		Life satisfaction (2-item scale: “Taking all things together, how happy would you say you are?”; 0 = <i>Not at all</i> to 10 = <i>Extremely</i> ; and the Cantril Ladder capturing where participants currently stand in life on a ladder from 0 = <i>bottom step, worse possible life</i>	$\beta = -.22^{***}$

<i>Sciences, 114(32), 8523–8527.</i>	The Netherlands	1,232	Feelings of not having enough time to get everything done (e.g., “I feel pressed for time today”; 1 = <i>strongly disagree</i> to 7 = <i>strongly agree</i>)	<i>imaginable</i> to 10 = <i>top step, best possible life imaginable</i>)	
				Life satisfaction (only the Cantril Ladder item)	$\beta = -.18^{***}$
	The Netherlands	818		Life satisfaction (Only the Cantril Ladder item)	$\beta = -.00^*$
	United States	1,802		Life satisfaction (the 2-item scale)	$\beta = -.02 (ns)$
	United States	60		Positive affect (12-item scale; e.g., “happy”; 1 = <i>very rarely/never</i> to 5 = <i>very often/always</i>)	$\beta = -.06 (ns)$
Poortman, A. R. (2005). How work affects divorce: The mediating role of financial and time pressures. <i>Journal of Family Issues, 26(2), 168–195.</i>	The Netherlands	1,296	Husband’s work hours (average number of hours worked per week during the first 5 years of marriage; range from 0 = <i>never worked</i> to 130 hours per week)	Probability of divorce (dichotomous variable capturing the moment when the couple stopped living together within a 10-year time period)	$B^a = -.016^*$
			Wife work hours (same measure; range from 0 to 90 hours per week)	Probability of divorce (same scale as above)	$B^a = .009^*$
			Husband overtime (dichotomous variable 0 = <i>worked less than 50 hours per week</i> ; 1 = <i>worked more than 50 hours a week</i>)	Probability of divorce (same scale as above)	$B^a = -.051 (ns)$
			Wife overtime (dichotomous variable 0 = <i>worked less than 40 hours per week</i> ; 1 = <i>worked more than 40 hours a week</i>)	Probability of divorce (same scale as above)	$B^a = .036 (ns)$
			Husband irregular work hours (e.g., night shifts, weekends) (measure of frequency; 0 = <i>never</i> , 1 = <i>sometimes</i> , 2 = <i>often</i>)	Probability of divorce (same scale as above)	$B^a = .20^*$
			Wife irregular work hours (same measure of frequency as for husbands)	Probability of divorce (same scale as above)	$B^a = -.10 (ns)$

			Marital interaction time (frequency of engaging in various activities, e.g., “visiting friends, neighbors, or colleagues”; 0 = <i>often without the spouse</i> ; 1 = <i>sometimes without the spouse</i> ; 2 = <i>never without the spouse</i>)	Probability of divorce (same scale as above)	$B^a = -.23^*$
Höge, T. (2009). When work strain transcends psychological boundaries: An inquiry into the relationship between time pressure, irritation, work-family conflict and psycho-somatic complaints. <i>Stress Health</i> , 25, 41–51.	Germany	576	Feelings of not having enough time to get everything done or to meet deadlines (“At work for this home care service one frequently has to hasten and yet cannot complete the work tasks”; 1 = <i>no, not at all</i> , to 5 = <i>yes, indeed</i>)	Work-family conflict (e.g., “The demands of my work interfere with my home and family life”; 1 = <i>no, not at all</i> to 5 = <i>yes, indeed</i>)	$\beta = .23^{**}$
				Cognitive irritation (e.g., “Even at home I cannot stop thinking about problems from work”; 1 = <i>no, not at all</i> to 5 = <i>yes, indeed</i>)	$\beta = .30^{**}$
				Emotional irritation (e.g., “I react irritably to other people although I do not want this”; 1 = <i>no, not at all</i> to 5 = <i>yes, indeed</i>)	$\beta = .19^{**}$
				Psychosomatic complaints (e.g., “Do you suffer from dizziness?”; 1 = <i>never</i> to 5 = <i>nearly daily</i>)	$\beta = .04 (ns)$

Notes. The “*r*” symbol represents the correlational coefficient that captures the strength and direction of the association between time poverty and each outcome. The “*i.e.*” symbol stands for standardised indirect effect of time measures on outcome measures as a result of all possible mediation paths. The “*m.e.*” symbol refers to marginal effects calculated at the mean for fast food and active travel probit equations and of discrete changes in the dummy variables from 0 to 1 for the other variables. The “*Beta*” symbol represents unstandardised logistic regression coefficient. The “*B*” symbol represents unstandardised linear regression coefficient. The “ β ” symbol represents the standardised linear regression coefficient. The “*OR*” symbol stands for odds ratio; The “*B^a*” symbol represents estimates based on discrete-time event history analysis construing a person-period file starting from the first year of marriage and ending with the year of divorce or the 10th year after marriage (when the couple stays married), and applying logistic regression.

*** $p < .001$

** $p < .01$

* $p < .05$

ns = not significant.

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