Chapter 13: Time Use and Balance

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Domain description

Introduction

Time is our most valuable resource. The way we behave and think about the past, present and future, our very conception of time, effects virtually every aspect of our lives - our relationships, careers, successes and failures, the decisions we make, the emotions we feel and, in the end, the very essence of our life experience. Research has also demonstrated the profundity with which our temporal beliefs and behaviors are interrelated with the world around us--in our culture, geography, climate, religion, social class, educational level and the political and economic stability of our surroundings (e.g. Zimbardo and Boyd, 2008; Levine, 1997).

At the April 2, 2012 UN meeting Bhutan's Prime Minister Jigmi Thinley called for "a new world economic system" of sustainable wellbeing, which, among other features, "gives us time to live and enjoy our lives and to appreciate rather than destroy our world." "Time use and balance" have been designated as one of the nine core domains of Bhutan's index of Gross National Happiness (GNH). This chapter reviews major findings concerning time use, its relationship to wellbeing and how these findings may inform policymaking.

Historic trends

Balanced time use begins with the issue of work hours. Working hours have varied greatly throughout history (Whaples, 2001). Medieval peasants worked seasonally, with long hours in summer and short ones in winter. They celebrated many Saints' days, leading to annual working hours similar to those in Western Europe today. In peasant societies, long hours were, and are, often interrupted by weather and the pace of work is less rushed.

The Industrial Revolution led to a near-doubling of annual working hours. Long work hours are associated with the early stages of industrialization in many countries. Through a series of struggles, labor and political organizations succeeded in greatly reducing working hours in industrialized countries during the period from approximately 1850 to 1950. The widely celebrated "May Day" began as a series of demonstrations for the eight-hour day.

The 40-hour work week, two-day weekends and limited vacation time became the standard in wealthy countries and many others after World War II. In

Europe and in a number of countries outside Europe, at least four weeks of vacation time is now standard. By contrast, the norm is two weeks in Korea, Japan and the United States (which actually has no vacation law at all—30 percent of US workers get no paid vacation time). Nor does the 40-hour mandate, or any work-week regulations at all, apply to workers in the 'informal economy' in many countries.

Time balance is now also affected by changes outside of working hours. Electronic devices and new advances in computer technologies keep many workers "leashed to the office" even during non-working hours. Long commutes add to time stresses, as does the vast amount of consumer choice in modern economies. Moreover, passive leisure, especially TV watching and internet surfing, now consumes greater segments of the day. Ironically, long working hours, as in the US, Japan and Korea, often lead to more TV viewing, as watching television is a passive activity perfectly suited to those who return home exhausted from work. In many countries where work hours are shorter, more time is given to socializing with friends and family or to active leisure. These trends are, of course, highly dependent on culture and other local factors. Current, post-recession, annual working hours in industrialized countries range from less than 1400 in Norway, the Netherlands and Germany to nearly 1800 in the United States and 2000 in Korea and the Czech Republic.

The issue of maximum work hours has been recognized for some time. In fact, the eight-hour day, often implying a 48-hour week, has been a key demand of labor groups representing the working class even before the establishment of the International Labour Organization (ILO) in 1919 (Alcock, 1971). The ILO has long held this demand high on its agenda. Lee, McCann and Messenger (2007) observe: "To the workers, the extension and generalized application of the eight-hour day represented a reform which no other could equal in value – a chance to share in the distribution of the new wealth created by modern industry and to receive that share in the form of spare time. More generally, the need to safeguard the health and wellbeing of workers was recognized; overlong hours had been shown to be harmful to economic efficiency as well as to material and moral welfare of the workers and to be incompatible with political democracy. Finally, there was a feeling in many quarters that international standards relating to hours of work might be a useful means of limiting the possibilities of unfair competition. In reflection of this trend of world opinion, the adoption of the eight-hour day and 48-hour week was a prime objective of the ILO (p.1)."

The quality of people's time goes beyond objective work hours, however. There are many sub-categories of time use. Even more importantly, the quality of one's time is reflected in subjective perceptions as much as it is in objective

categories. Unsatisfying time quality is present when people feel constantly rushed, feel a lack of time to enjoy activities and share them with others, and experience their work as uncreative drudgery. The notion of 'time balance' attempts to incorporate these and other issues. A new economic paradigm based on sustainable wellbeing or happiness would reassess the relative valuation of work and leisure now prevalent in calculations of GDP and give greater value to the importance of leisure or free time. (See, e.g., Moss and Deven, 1999; Clark, Harvey and Shawn, 1990; Boniwell, 2009).

Existing sub-domains

The two main sub-domains of time use in Bhutan's GNH index are work hours and sleep hours. This derives from the assumption that time poverty eminates from lives that are overly-controlled by paid and unpaid work and a resultant lack of sleep. There are many sub-categories within these classifications, however. Generally, time researchers have divided the day into a range of activities, some of which overlap with others and are not neatly defined. For example, meal preparation might be seen as domestic work—a chore—or, in other situations, as active leisure. Some of the typically measured categories of time use include (e.g. Robinson and Godbey, 1997):

A. Paid employment
B. Unpaid domestic or volunteer work
C. Self-care—meals, grooming, prayer, meditation, etc.
D. Socializing with family or friends
E. Active leisure—exercise, athletics, reading, lifelong education, theater, art, music,
F. Passive leisure—watching TV or films, sitting on the beach, etc.
G. Shopping
H. Rest
I. Sleep

A balanced life, leading to greater wellbeing, can be seen as one which pays attention to each of these activities and, depending on the individual, culture and situation, combines them optimally.

Additional temporal issues to be considered in time use policies

There are a number of time-related issues beyond those concerning the pure number of work and leisure hours that should be considered when formulating policies. Many of these show considerable variation across cultures and a proper understanding of the value a culture attaches to these issues is essential when formulating policies. In addition, many of these are critical to understanding the subjective perception of actual time use. Some temporal

characteristics that are especially pertinent to the perception of optimal balance include:

Temporal perspective

Time perspective is one of the most powerful influences affecting almost all aspects of human behaviour, such as delinquency, educational achievement, health, sleep and dreaming patterns, and choices of romantic partner, thus affecting our quality of life (Boniwell and Zimbardo, 2003). Data suggests that individuals have tendencies to be either more past, present or future oriented. However, as there are problems associated with an excessive orientation towards any one perspective, a balanced time perspective has been proposed as the ideal mode of functioning. Individuals with a balanced time perspective have been shown to be happier on both hedonic and eudaimonic indicators, suggesting that learning to achieve a balanced time perspective may be one of the keys to unlocking personal happiness (Boniwell et al., 2010).

Work-leisure balance

It is important to recognize that there are cultural differences in the value placed on work, on leisure, and on the balance between the two. Although some balance is universal, the preferred formulas differ both across cultures and between individuals in each culture. The differences are marked even within highly industrialized countries, The U.S. and Japan are famous for long work hours, as exemplified by the terms "workaholic" and "karoshi" (Levine, 1997). European nations tend to also emphasize hard work, with many differences between countries, but generally put greater emphasis on preserving non-work time than do people in the U.S. and Japan. Policies pertaining to work hours must take into account each culture's belief as to the appropriate balance between work and leisure.

Ask versus social time

Time spent within the work place also varies across cultures. People tend to spend more of their work time on-task in some cultures and more on socializing—informal chatting, having tea or coffee with colleagues, etc.—in other cultures. Studies have found wide cultural variation in answers to the question: "In the companies for which you have worked, what per cent of time do people typically spend on tasks that are part of their job description." For example, people working in companies in large cities in the United States tend to report in the range of "80 per cent task time, 20 per cent social time." On the other hand, people working in companies in India, Nepal, Indonesia, Malaysia, and some Latin American countries tend to give answers closer to "50 per cent task time, 50 per cent social time" (Brislin and Kim, 2003).

Clock and event time

One of the most significant differences in timekeeping throughout history has been between people operating by the clock and those who measure time by social events (Lauer, 1981). This profound difference in thinking about time continues to divide cultures today. Under clock time, the hour on the timepiece governs the beginning and ending of activities. Under event time, scheduling is determined by the flow of the activity. Events begin and end when, by mutual consensus, participants "feel" the time is right (Levine, 1997). Many countries exhort event time as a philosophy of life. In East Africa, there is a popular adage that "Even the time takes its time." In Trinidad, it is commonly said that "Any time is Trinidad time." In the United States and much of Europe, by contrast, the right way to measure time is assumed to be by the clock. This is especially true when it comes to the work hours. Time is money and any time not focused on-task is seen as wasted time.

There is nothing inherently superior about either clock or event time-keeping. Each have distinctive strengths and weaknesses and each, or a blend of the two, can be more functional depending on the nature of the task, the characteristics of the individuals involved and the predominant norms and values of a culture.

Polychronic and monochronic time

Industrial/organizational psychologists emphasize the significance of monochronic versus polychronic work patterns (Bluedorn, 2002). People and organizations in clock time cultures are more likely to emphasize monochronic (M-time) approaches, meaning they like to focus on one activity at a time. People in event time cultures, on the other hand, tend to emphasize polychronic (P-time) approaches, meaning they prefer to do several things at once (These labels were originally develop by Hall (1983)). M-time people like to work from start to finish in linear sequence: the first task is begun and completed before turning to another, which is then begun and completed. In polychronic time, however, one project goes on until there is an inclination or inspiration to turn to another, which may lead to an idea for another, then back to first, with intermittent and unpredictable pauses and re-assumptions of one task or another.

P-time goes beyond what is popularly known as "multi-tasking." P-time cultures emphasize the completion of human transactions rather than keeping to schedules. For example, two P-time individuals who are deep in conversation will typically choose to arrive late for their next appointment rather than cut into the flow of their discussion. Both would be insulted, in fact, if their partner were to abruptly terminate the conversation before it came to a spontaneous conclusion. Policies must be sensitive to these differences.

Silence and "doing nothing"

In some cultures, notably the USA and Western Europe, silence makes people uncomfortable. It may denote nothing is happening or that something is going wrong. The usual response is to say something, to fill the silence or to keep the meeting or conversation going. People in other cultures, including many Asian and Pacific Island nations, are quite comfortable with silence. It may be seen as an opportunity to focus inward and gather one's thoughts before speaking. The Japanese emphasize "ma," which roughly translates as the "space" between things, or the "pause." It implies that what happens between things, or what doesn't seem to be happening, is as or more important than what is visibly happening. As an extreme example, people in Brunei often begin their day by asking: "What isn't going to happen today?"

Brislin (2000) has described how cultural misunderstandings and counterproductive decisions often arise from these differences. For example, "Americans will sometimes misinterpret long periods of silence as a signal that they should make a concession. Their negotiating counterparts in Asia know this and will sometimes prolong their silence in the expectation that a concession will be made." These differences may appear both within and outside the workday.

Wasted time

A related temporal difference concerns what people perceive as "wasted time." People, cultures, and economies that emphasize the rule that "time is money" may see any time not devoted to tangible production as wasted time. People in other cultures, however, believe that overemphasis on this rule is a waste of one's time in a larger sense, i.e. it is a wasteful way to spend the time of one's life. If something more worthy of one's attention—be it social- or work-related-- challenges a planned schedule, it is seen as wasteful to not deviate from the planned schedule. More accurately, the term "wasted time" may make little sense. A typical comment may be, "There is no such thing as wasted time. If you are not doing one thing, you are doing something else" (Levine, 1997, p.91).

Norms concerning waiting

Cultures differ in their norms for waiting, not only how long it is appropriate to keep a person waiting but how the rules change depending on the situation and the people involved. Levine (1997) describes a number of "rules" to waiting and how these rules differ in various cultures. Some useful questions: Are the rules based on the principal that time is money? Who is expected to wait for whom, under what circumstances and for how long? Are some individuals--by virtue of their status, power and/or wealth--exempt from waiting? What is the protocol for waiting in line? Is it an orderly procedure, as in the United Kingdom, or do people just nudge their way through the crowd, pushing the

people ahead of them, until they somehow make their way to the front, as in India? Is there a procedure for buying oneself a place in front, or off the line completely? What social message is being sent when the accepted rules are broken?

The pace of life

There are profound differences in the pace of life on many levels — individual temperament, cultural norms, between places, at different times and during different activities. The consequences of the pace of life for individual, social and economic wellbeing are often double-edged.

For example, in a series of field experiments conducted in 31 countries, Levine and his colleagues (e.g., Levine and Norenzayan, 1999) found that the pace of life of a city was related to the physical, social and psychological wellbeing of individuals. On the negative side, faster places tended to have higher rates of death from coronary heart disease, higher smoking rates, and were less likely to take the time to help strangers in need. On the positive side, however, faster places were more economically healthy, and residents tended to self-report being somewhat happier in their lives. These seemingly contradictory findings were related to the double-edged conseuences of economic productivity. Economic needs are primary forces in creating a sense of time urgency, and that sense of time urgency in turn leads to a productive economy. The resultant work norm has both positive and negative consequences. On the one hand, the focus on making every minute count and being productive creates the stressors that lead to cigarette smoking and coronary heart disease. On the other hand, they provide sufficient resources to meet peoples' basic needs, which both Easterlin and his critics agree is related to happiness. The key is to achieve a balance in time use between economic productivity and personal welfare in order to minimize the costs and maximize the wellbeing of individuals and their communities.

Measuring time use

Social scientists and economists have developed a number of methodologies to measure time use. The most traditional approaches have used retrospective interviews and surveys. Kahneman and his colleagues, for example, have constructed a sophisticated time use diary measure in order to understand the consequences of temporal behaviors for wellbeing (Kahneman et al., 2004). A number of other more general, regularly conducted surveys (e.g. the Gallup polls) include questions about time use and time balance.

Most commonly, however, researchers have collected data through self-recorded time diaries. These diaries use a variety of methods. Some ask respondents to keep a paper-and-pencil daily diary of how they spend their

time. More technologically sophisticated "experience sampling" techniques ask individuals to carry a portable e-device. The device beeps at random intervals during the day and prompts them to answer a series of questions describing what they are doing, what they are thinking about and how they are feeling at that particular moment.

There are a number of extensive data sets reflecting individual time use. Two of the best sets come from the "Multinational Time Use Study" and the "American Heritage Time Use Study," both of which are available at the website for the Centre for Time Use Research at Oxford University (http://www.timeuse.org). These data may provide valuable information not only by tracking patterns of time use, both at the individual and national level (e.g., Fisher and Robinson, 2009) but, in addition, demonstrating how these activities impact wellbeing (Kahneman et al., 2004). Sophisticated statistical techniques have and are being developed to better understand relationships like these. Social scientists and economists have constructed weighted formulas that determine not only average happiness during individual activities but which help to understand more nuanced patterns. For example, Gershuny (2012), of the Centre for Time Use Research, has recently published a measure of 'National Utility' (NU) that quantifies the hedonic value of different activities experienced by individuals. There are also a number of useful measures of perceived time use that may be drawn upon (e.g., Kasser and Sheldon, 2009; Zimbardo and Boyd, 1999). These data can be used to develop policies that maximize the perceived quality of experienced time within a cultural context.

Major research findings

Brief summaries of research findings that form the background for proposed policy recommendations include studies within both the objective and subjective paradigms of time use.

- There are large international differences in work hours. There are also large international differences in the degree to which official policy controls the number of hours. These data have been presented in different formats, sometimes with differing outcomes, by different sources. The following statistics are from the Organisation for Economic Co-operation and Development (for more detailed data and trends over time, see: OECD, 2013).

Who works the longest?
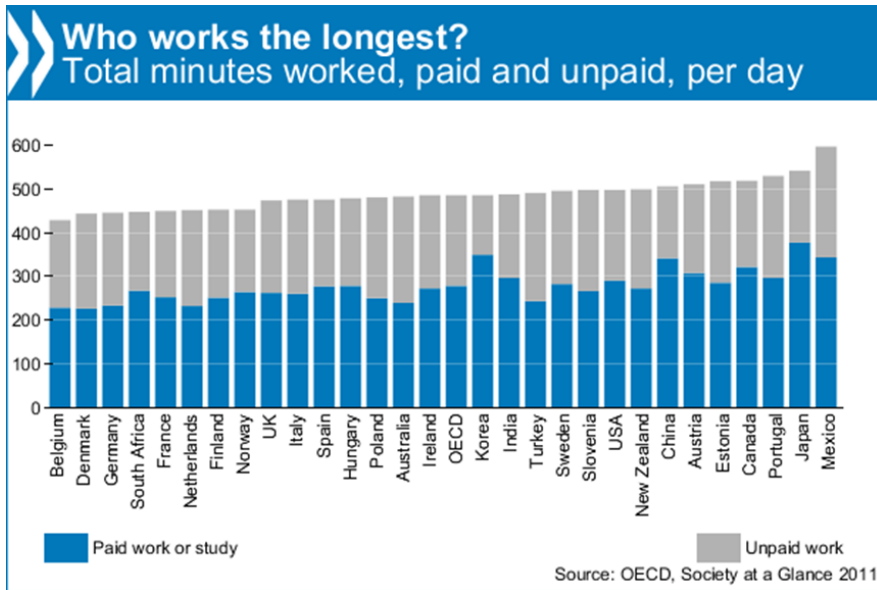Total minutes worked, paid and unpaid, per day

Table 4. *Who works the longest?*

- The European Quality of Life Survey reveals a strong correlation between time use and subjective wellbeing, finding that people who had long work hours and poor work-life balance generally have low subjective wellbeing (Böhnke, 2005).

- Research on time affluence shows that people with shorter work hours are more satisfied with life, engaged in more positive environmental behaviours, and have smaller ecological footprints (Kasser and Sheldon, 2009).

- Work hours have ramifications beyond that of individual happiness. For example, a recent study demonstrates that significant reductions in carbon emissions are possible through reducing work hours, and could help to reduce climate change (Rosnick, 2013).

- Happiness researchers find that among daily activities, paid work ranks next to last in reported satisfaction, ranking above only the hated morning commute. Active leisure activities (including intimate relations), socializing and meals produce the highest reported satisfaction, with passive leisure (e.g., rest, shopping and domestic chores in the middle. Volunteering, not included in these studies, seems to have a highly positive effect on happiness (Diener and Biswas-Diener, 2008).

- Objective leisure time availability (as assessed by time use survey) does not necessarily translate into subjective perception of its availability. Since 1965, the leisure time in the Western countries has increased by 5-7 hours a week, yet the majority of respondents experience a subjective decrease in their leisure time. On average, respondents estimate that they have fewer than 20 hours of free time a week, which is about half of what they actually have (Sullivan and Gershuny, 2001).

- There are large between-country differences, both officially and unofficially mandated, paid and non-paid, in various domains of non-work time. These include: holidays and vacation time, short- and/or long-term sick leaves, personal days, paid leave for jury duty, bereavement leave, community service leave, floating holidays (the option to take assigned holiday days when one wishes), sabbatical leaves, options to borrow leave time, options to buy leave time, and options to contribute leave time to another employee. A few countries have created especially liberal leave policies. Sweden, for example, has offered both extended maternity and paternity paid-leaves after the birth of a child. An example of cross-national differences in paid vacation time, even when examined in OECD nations, is seen in a 2007 analysis by the Center for Economic and Policy Research (Ray and Schmitt, 2007):

Vacation and Holiday Laws

Figure 1 summarizes the legal right to paid vacation for 21 of the richest countries in the world (see also **Table 1**). Where applicable and separate from paid vacation, the figure also shows the total number of legally mandated paid holidays. From left to right, countries are ordered from most generous (France, 30 days) to the least generous (the United States, 0 days).

FIGURE 1:
Paid Vacation and Paid Holidays, OECD Nations, in Working Days
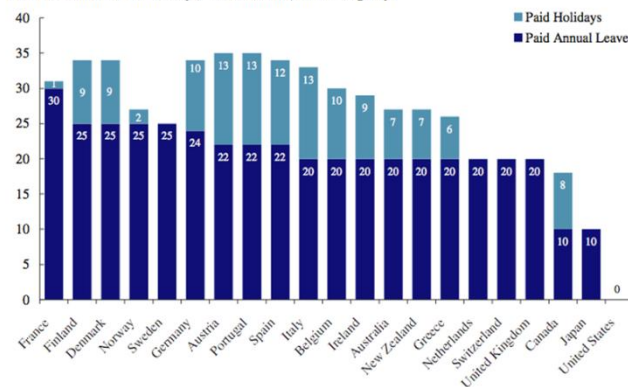
Sources: See Table 1
Note: Several nations' laws refer to workdays, while others refer to calendar days or weeks. Our comparison assumes a five-day workweek. For a more precise listing, see Table 1.

Figure 8. *Paid vacation and paid holidays, OECD Nations, in working days*

- Pentland, Harvey and Walker (1998) analysed time use by men with spinal cord injury. Contrary to their own predictions, they discovered that the amount of time spent in any (even preferred) activity was not predictive of life satisfaction, but the satisfaction with time use (or satisfaction with the balance of time use) was strongly predictive of life satisfaction/wellbeing. They conclude that "objective characteristics of time use (i.e. minutes) matter far less than the conceptual intrinsic aspects of the time (meaningfulness, challenge, satisfaction) for the individual" (p.20).

- Feeling in control of one's time is an important predictor of satisfaction with time use (Gordon and Caltabiano, 1996; Hafstrom and Paynter, 1991; Boniwell, 2009). Zuzanek (2004) found that people in managerial positions working longer hours report higher satisfaction with work and less time crunch than those working shorter hours in low-choice and control occupations. He writes: "People can work longer hours without feeling 'time crunched' if they have freely chosen their work and are interested in it" (p.131).

- A large number of studies indicate the benefits of autonomy at work (reviewed in Gagné and Bhave, 2011), which is associated with higher employee engagement, wellbeing, and work performance in different work contexts and cultures. Ability to influence or determine one's work schedule, extent of engagement, location of work, type of work, time of retirement is associated with increased wellbeing and higher work-life balance.

- Time use surveys indicate the increases in free time have been devoted to television viewing. In fact, one of the proposed explanations for the Easterlin paradox is the re-investment of free time into television watching. Currently, the average daily time spent in front of TV is 3h32min in France, 4h in the UK and 5h11 min US, accounting to 10 years of watching TV vs. 9 years of working in an average lifetime). TV viewing is associated with boredom, a low level of concentration, a low level of potency, lack of clarity of thought, higher materialism, fewer social ties, lower sleep, and higher fear of death, higher obesity, and increase in upwards social comparison. The profound increase in time spent on other electronic media (computers, cellphones) adds dramatically to these findings (Desmurget, 2012).

- Time perspective, or a cognitive bias towards locating thoughts and actions in the domains of either past, present or future has a strong influence on all aspects of wellbeing. Individuals with a balanced TP are

happier than the rest of population, both in terms of hedonic and eudaimonic wellbeing, scoring higher on measures of satisfaction with life, positive affectivity, subjective happiness, optimism, self-efficacy, self-actualisation, purpose in life and time competence (Boniwell et al, 2010).

- Feeling rushed tends to be more damaging than being busy (Levine, 2005). Robinson (2012) asked people two questions: (1) How often do you have time on your hands? (2) How often do you feel rushed? Findings from the United States indicate that self-reported happiness is highest in people who are less rushed and have less excess time. Again, it would be helpful to measure cross-cultural differences nations on these questions.

Considerations underlying policy recommendations

What is the most constructive balance between work and non-work hours, and the composition of activities within these hours, from the perspective of all participants—the worker, the family, the community, the organization and the nation? How can policies be developed that take into account cultural differences concerning beliefs about time? It is important to answer these questions with a long range perspective. Some general issues that must be considered in policy decisions:

Human rights issues must take priority

All policies must begin with this value in mind. This especially concerns policies pertaining to such issues as total work hours, workplace conditions, and coercion and exploitation of lower status individuals. This is especially pertinent to policies concerning women, children and other disadvantaged, less powerful groups.

Supporting relationships/relatedness and families

Giving people more opportunities to establish and maintain relationships, give and get social support in different life domains (family, work, unpaid work, etc.) leads to higher experience of relatedness and higher wellbeing. There is a particular need to formulate policies that enable workers to balance their jobs and family lives. This balance is strongly affected by other needs and behaviors within particular cultures. A special concern is gender expectations. Policies should both reflect the increasing numbers of women entering the labor market and insure a balance that does not shortchange their children and families.

Avoid overwork and burnout

Workers who are forced to work excessive hours in the short-term are more prone to the "burnout" syndrome. This has negative consequences for all involved (e.g., Maslach, Schaufeli and Leiter, 2001). It takes a toll on the psychological and physical wellbeing of the worker and is ultimately costly to

the organization which is left with a less productive worker in the long run. The challenge is to develop policies that reduce the probability of burnout while maintaining sufficient hours and energy devoted to production.

Encourage time use that benefits community engagement and vitality

Provide people with more opportunities to engage into activities that are synergic in the sense that they benefit their own wellbeing and that of other people, society as a whole. Increased focus on production may have the unfortunate consequence of decreasing the time people devote to help others. For example, in a series of field studies conducting in 23 cities around the world, Levine and his colleagues found a negative relationship between the overall pace of life of cities and the likelihood that residents would offer help to a stranger in need (Levine, 2003; Levine, Reysen and Ganz, 2008).

Two of the core components of the vision of Gross National Happiness developed in Bhutan are connectedness and service. The Prime Minister of Bhutan observed "We know that true abiding happiness cannot exist while others suffer, and comes only from serving others, living in harmony with nature, and realizing our innate wisdom and the true and brilliant nature of our own minds . . . That our work only exists to serve others is the very essence of Gross National Happiness." He adds: "A GNH-educated graduate will have no doubt that his or her happiness derives only from contributing to the happiness of others." These assertions are supported by recent research. For example, Diener and his colleagues (e.g. Diener and Biswas-Diener, 2008) report considerable evidence that happier people are better citizens at work, e.g. they tend to help others more, do better in social relationships, are more capable in difficult situations, are better liked by others and, on average, are more altruistic and attentive to the needs of others. Policies concerning time use should reward these behaviors.

Strive for an optimal balance between flexibility and clarity

On the one hand, policies should be as flexible as possible (see below). It is best to avoid either/or policies. On the other hand, policies must be sufficient clear that they will be enforced.

Policies must be sensitive to the cultural context

Cultures differ on many characteristics that reflect fundamental beliefs and values. The previous section (Section III) described a number of culturally-sensitive temporal dimensions. There are also well-documented differences concerning more general culture-specific values that need to be considered. For example, policies should be sensitive to cultural differences in:

a. Emphasis on status distinctions: Are status distinctions embraced or resisted? Some cultures are more hierarchical (e.g. Japan) than others

(e.g. the U.S.A.). Policies based on strict distinctions will not be appropriate in some cultures and vice versa.

b. Individualism vs. collectivism: Western cultures tend to place an emphasis on individuals and their nuclear family. Asian cultures tend to place priority on the greater collective.

c. Emphasis on achievement: There are cultural differences in values reflecting the importance of achievement. This is especially the case when it comes to sacrificing other activities, such as spending non-work time with people or in other leisure activities.

These are just a few examples of cultural differences in values and norms (see: Heine, 2011) for a more extensive discussion of cultural differences). The important point is the need to be sensitive to cultural differences when designing policies and to be wary of trying to apply a policy that may be appropriate in one culture to others.

Policies must be crafted with flexibility to optimally match the skills and temperaments of individuals within these cultural contexts

There are also vast individual differences within cultures on all of the temporal dimensions in Section I.II. To take just one example, not only are some cultures more oriented toward working on a schedule but, within cultures, some workers may prefer to work on clearly defined schedules while others may prefer to complete their work on their own schedules.

Policies must be crafted with sufficient flexibility to take into account the nature of particular jobs and tasks within jobs

The specific behavioral content of activity is not as important as the 'person-activity fit' (Lyubomirsky, Sheldon and Schkade, 2005). In a corporation, for example, some positions may require tight scheduling of time (e.g. accountants during tax time). On the other hands, employees in research and development may be most productive when less tightly controlled. Therefore, when it comes to increasing happiness that results from balanced time use, policy measures promoting the opportunities for choice are expected to be more effective than those promoting specific behaviors'.

Encourage autonomy and control of how people spend their time.

For the destitute, time poverty is often unavoidable given the amount of time spent in inefficient, poorly paid, time-intensive activities simply to feed, clothe, and house one's family. For those who are not materially poor, good time balance is at least partly a matter of subjective experience. The importance of creating a sense of autonomy and control, both inside and outside the workplace, is central to this aspect of wellbeing.

Providing people with more autonomy and control in different life domains encourages them to engage in consciously chosen activity, rather than that imposed upon them. This leads to higher quality of time spent. Research has shown that high levels of goal progress or attainment predict increased wellbeing (Brunstein, 1993; Sheldon, 2002). However, this increase is most likely when the goals a person chooses and attains are self-concordant (Sheldon and Elliot, 1998; 1999; Sheldon and Kasser, 1995; 1998), which has been shown to apply to both Western and non Western cultures (Sheldon et al., 2004).

This applies to leisure time as well as work time. It is notable that leisure time may be fast-paced and over-scheduled, but is far more likely to include self-chosen activities. Domestic chores, shopping, etc. are likely to combine both reasonable self-choice as to schedule *and* activities done for the sake of necessity rather than interest, placing them between work and leisure/socializing in terms of reported satisfaction. A sense of control also applies to longer-term temporal issues, such as job security and retirement age and conditions.

Psychologists have developed numerous methods for enhancing autonomy. One, for example, is by encouraging mindfulness (which is a resource necessary for making choice) by providing time and encouraging people to focus on their life and life of other people, to devote time to choosing and evaluating their life goals, making them more self-congruent (Brown and Ryan, 2003).

Support competence.

Giving people, particularly those from disadvantaged groups (unemployed, retired, disabled) more opportunities to avoid feeling powerless and experience competence. A specific aspect of this is supporting effortful action, rather than passive consumption. An effort has to be made in order to feel one's ability to change something in oneself or in the world. Another aspect is supporting meaning experience in people by providing social messages about universal human values that may make bring meaning to life for the person and other people.

Recommendations for policy measures

We propose a series of policies to enhance the quality of objective and subjective time use:

Productive work hours

Because work takes roughly one third of the time we spend as adults, wellbeing at workplace might be nearly as important to policy makers as physical health.

Recommendation 1: Introduction of a mandatory shorter maximum working week of 35 hours.

Moving towards a shorter or compressed working week would serve three major purposes: (1) safeguarding the natural resources of the planet through breaking the "earn more, spend more" cycle and consuming less energy, (2) increasing individual and community well-being through utilising free time for communication, family- or community-building activities, (3) building a more robust economy through increased per-hour productivity, reducing absenteeism caused by stress related to work-life imbalance and reduction in unrealistic borrowing (Coote, Franklin and Simms, 2010).

Case study: It is an axiom in happiness research that people do not necessarily know what will make them happy (Gilbert, 2006). Most importantly, in this case, people often believe that what will make them happiest is more money. But substantial data exists to show that money is often less consequential then more time. A recent story from Amador County, California, illustrates this point rather clearly.

In 2009, under financial pressures, the county supervisors of Amador County voted to limit all but essential employees to a four-day week for nine hours each day. Salaries would be cut by ten percent commensurate with a ten percent reduction in work hours. Workers and the union which represents them protested vociferously but the county argued that, otherwise, it would have to lay off employees. Union leaders agreed to the arrangement, but for only two years.

In 2011, county workers were given a choice of returning to a five-day week with a pay increase and losing some of their colleagues to layoffs, or remaining with four days at reduced pay. Without directly consulting its members again, the union chose the five-day week. The returning employees soon had second thoughts. Many were unhappy because they were actually enjoying their four-day weeks. In August, the union polled its members. Seventy-one percent chose to return to the shorter week, even with less pay. Only 29 percent wanted to keep the longer workweek.

The Amador County story, however small in scale, deserves attention. It is clear that the extra day off has relieved stress and improved family life for many workers. It may also be reflected in better health outcomes. We need studies to understand whether or not this is the case, since it might also be possible that nine-hour days and faster work schedules have negated some of these gains. Clearly, however, the reduced schedule became preferable to most workers. Moreover, it saved the jobs of ten percent of the work force (de Graaf, 2012).

Recommendation 2: Place reasonable caps on overtime hours or incentives to businesses to reduce overwork (e.g., by fixing minimum compensation for overtime).

Working long hours is associated with a wide range of adverse health outcomes and increased safety risks, as well as lower psychological wellbeing (Nishiyama and Johnson, 1997; Burke and Fiksenbaum, 2008). Placing reasonable caps on overtime hours has beneficial effects, as it prevents health problems resulting from overwork, improves the work-life balance and quality of relationships, particularly in dual-earner couples (Glorieux, Minnen and van Tienoven, 2011) and working mothers (Scarr, Philips and McCartney, 1989). Kasser and Sheldon (2009) suggests placing reasonable caps on the maximum number of hours a person can work, providing workers with a right to refuse overtime after 48 hours on the job per week. This will increase workers' sense of autonomy and give them more time to spend with family and friends and to participate in civic and volunteer activities, benefiting the wider community.

Recommendation 3: Limit night work, whenever possible

Night work involves workers remaining awake and performing duties at a time when their body is biologically programmed to be asleep (Pati, 2001; Horowitz and Tanigawa, 2002). Night work can be potentially dangerous as it increases the risk of accidents, the mortality rate and it also decreases the performance of workers (Knutsson, Hammar and Karlsson, 2004; Santhi et al., 2005). Working at night has also shown to alter sleep patterns of workers and disrupt circadian rhythms (Buxton et al., 2000). It also negatively affects performance, increases occupational stress and tiredness, resulting in a decline in quality of family and social life (Fujino et al., 2001; Suzuki et al., 2004). Studies also show that more errors are made by night workers (Coffey, Skipper and Jung, 1998).

Many studies have highlighted night shift related problems in nurses (Kemp, 1984; Infante-Rivard, Dumont and Montplaisir, 1989; Minors, Healy and Waterhouse, 1994). A study involving 55 nurses found that night work resulted in lower concentration, interest, energy and sleep (Adeniran et al., 1996). Knauth (1993) suggests that night work should be limited as much as possible, as it does not suit the majority of shift workers. The negative effects of night shifts such as sleep disturbance and sleepiness is widely acknowledged, as well as numerous other health problems associated with night work (Crofts, 1999; Davis, Mirick and Stevens, 2001; Horowitz et al., 2001; Wagner et al., 1998). Night workers are likely to rely on alcohol to cope with sleep problems (Ohida et al., 2001) and have a disrupted social life (Ohida et al., 2001; Behar and Tilley, 1999). The disruption of social life may be measured in "unsocial time,"

meaning time that others are socializing during non-work hours that the individual cannot engage in.

Work schedules and content

Recommendation 4: Encourage worker-oriented and/or initiated flexibility

In both industrialized and developing nations, flexible arrangements have tended to be primarily designed and put in place by employers to maximize their own profits. However, in a limited number of countries these arrangements have been designed to be of mutual benefit to employers and employees. These plans have been most common in Europe but have appeared in rare instances in undeveloped countries. For example, legislative reforms in Senegal several years ago established policies intended to give workers the ability to adapt their work schedules to benefit their personal lives. These types of plans, which target the mutual benefit of employees and their employers, should be highly encouraged by policies. This is one domain where a single policy would appear to be beneficial across cultures (Lee, McCann and Messenger, 2007).

Recommendation 5: Develop alternate work schedules that maximize morale and wellbeing

Although alternate work schedules per se do not improve work-life balance, ability to control one's schedule is associated with better perceived work-life balance, regardless of the number of hours worked (Tausig and Fenwick, 2001). Many arrangements have been tried. It is important to note that although these arrangements can potentially serve the best interest of workers, precautions must be taken, particularly in underdeveloped countries and lower level jobs, to prevent their being used to exploit workers. Three examples of arrangements that have proven successful when done with these precautions in mind, are:

a. Hours averaging or modulation: These arrangements typically specify an average number of hours to be worked each week but allow workers to meet this target by averaging out their hours over a longer period of time, anywhere from several weeks to a year. These arrangements are becoming more common in some countries, e.g. Brazil, China, the Czech Republic and Hungary (reported in: Lee, McCann and Messenger, 2007).

b. Weekly rest periods: There are two main variants on this type of arrangement. The first is to provide a longer period of weekly rest. Some countries where the normal work week has been six days are moving toward extending the weekly rest period to two days. In Malaysia, for example, the main trade union body (the Trades Union Congress) has set the adoption of a five-day working week as one of its top priorities. The

second variant is to more strictly enforce the prohibition of work on rest days. (Lee, McCann and Messenger, 2007).

c. Part-time work: These arrangements take many forms. They are often done at the discretion of the employer and can be exploitive. For example, two or more part-time workers may be seen as more productive than one full-time employee because they can work with fewer breaks, less fatigue, etc. In some cases, part-time workers are less costly because they do not qualify for benefits, vacations, etc. On the other hand, part-time arrangements, when done in proper consultation with employees and with concern for employee concerns hold the potential to benefit both workers and their employers.

Recommendation 6: Develop policies that avoid the excesses of part-time work.

Part-time arrangements, which are another type of non-traditional work arrangement, may take many forms. They are often done at the discretion of the employer and can be exploitive. For example, two or more part-time workers may be seen as more productive than one full-time employee because they can work with fewer breaks, less fatigue, etc. In some cases, part-time workers are less costly because they do not qualify for benefits, vacations, etc. On the other hand, part-time arrangements, when done in proper consultation with employees and with concern for employee concerns hold the potential to benefit both workers and their employers.

Recommendation 7: Provide incentives for employers to encourage their employees to undertake work from home.

The work from home has benefits, such as lower commute time, decrease in fuel use, and higher commitment to employer, 60% of time saved from transportation given to employer. A frequently mentioned strategy to decrease traffic congestion is to encourage more workers to work at home occasionally (Downs, 2002). Employers can benefit from the reduced operating costs of their employees working at home, such as office space, energy costs (Turcotte, 2010).

One of the primary advantages of working at home is that a better work-life balance (Kurland and Bailey, 1999) and higher levels of time use satisfaction (Wheatley, 2012) can be achieved. More specifically, greater freedom is likely as workers can choose their working hours and commuting time is also reduced, so that more time becomes available for domestic activities, such as child care and recreational activities. However, there is evidence that working from home in combination with a tendency to overwork may be detrimental to home life (Crosbie and Moore, 2004); this measure needs to be implemented in combination with capping overtime hours.

Recommendation 8: Replace unnecessary paperwork and beauracratic work requirements with more meaningful activities.

Administrative barriers lead to time spent on coping with bureaucratic obstacles. Although systematic studies of this sort are difficult and virtually non-existent, countries differ strongly by the number of hours people spend on average coping with administrative barriers. For instance, the time required to start a business ranges from 2 days to 694 days but is generally limited to 14 days in most developed countries (and those with the highest happiness levels). Psychologically, the time spent producing paperwork necessary to justify and support one's actions is not associated per se with basic need satisfaction and is perceived as meaningless and empty. Time expenses on bureaucracy also reduce the amount of time citizens can spend on productive activities and non-work activities that satisfy basic needs and increase happiness. Removing administrative barriers frees citizens up more time for meaningful time use and supports.

Recommendation 9: Encourage employer-provided services to increase workers' disgressionary time outside the workplace.

Although not strictly work-hour arrangements, some progressive companies try to offer services that save workers time they might be spending on personal maintenance during their non-work hours. Many large Silicon Valley companies in the United States have taken the lead in this movement. Google, for example, offers free express-luxury buses to its employees for their commutes. They also provide free and convenient on-site laundry, shoe repair and other employee time-saving services. A number of companies offer child-care services to employees. Facebook gives new parents extra spending money, some of which may be used to buy assistance with childcare. Stanford Medical School and other employers are providing housecleaning services and in-home delivery of dinner. Genentech helps employees find last-minute baby sitters when their child gets sick and needs to stay home from school. Companies sometimes offer personal trainers, nutritionists and even free marital counseling. "The goal is not just to reduce stress for employees, but [also] for their families . . .These type of services provide employees with more discretionary non-work time and also signal recognition of the importance of their lives outside the workplace" (Richtel, 2012).

Vacation and leave time
Recommendation 10: Mandate required paid vacation.
Kasser and Sheldon (2009) argue that all workers should have a minimum of three weeks paid vacation. There are significant cross cultural differences

regarding vacation legislation. In the European Union, the legal minimum vacation for workers is four weeks. However, there is no legal minimum in the U.S. Many poor Americans often receive no paid vacation and often feel pressure to not take it. This shows that not only do some individuals have less opportunity to physically rest and relax, they also face difficultly finding time for family and friends and pursuing hobbies, which all contribute to subjective wellbeing.

Recommendation 11: Develop policies to avoid burnout

Several policies have been successful, in the right contexts, in maintaining long-term morale, enthusiasm and productivity of workers. For example:

a. A given number of "personal days" off, at full pay, may be allocated on a monthly or annual basis. These days are in addition to vacation time.
b. "Downtime" or "personal time" may be built into the workday.
c. In other work environments, organizations have policies whereby workers are shifted into new positions when they are burning out in older ones.

Whenever possible, policies should reward good workers with leave time (see below). This may take the form of short-term leaves, extension of vacation time or longer-term sabbaticals. When done appropriately, these leaves may lead to refreshed workers, higher morale and a greater sense of belonging to one's organization, all of which lead to happier and more productive workers for longer periods of time.

Recommendation 12: Develop leave time policies for dealing with significant life events

In order to improve employees' feelings of time affluence, businesses could give workers more time off during significant life events that require specific effort to cope with (e.g. birth of a child, illnesses of family members). Currently, among nations there are substantial differences regarding the quantity and quality of family leave.

It is important to encourage paid parental leave for men and women, including a proportion of non-transferable parental leave for mothers and non-transferable parental leave for fathers. New parents in most European nations receive 14 weeks of leave at full wages or 52 weeks of leave at half wages, whereas there are more generous policies in other nations (i.e. Cuba, Uzbekistan, South Korea). However, paid parental leave is not guaranteed in nations such as Liberia, Papua New Guinea, Australia and the United States.

Paid leave for new fathers is less common than for mothers. There is, however, evidence to show that promoting paternal involvement in the early years of a child's life is crucial for their later socioemotional and cognitive development (Lamb, 2004; Tamis-LeMonda and Cabrera, 2002). Research shows that Swedish fathers who use most of their leave are more engaged in their family commitment, work fewer hours and participate more in child care duties and household work (Haas and Hwang, 1999; Nepomnyaschy and Waldfogel, 2007). Furthermore, Finnish fathers who had taken parental leave reported that this allowed them to form closer bonds with their child (Huttunen, 1996). Similarly, the UK Millenium Cohort Study which includes a large, nationally representative sample of children aged 8-12 months found that fathers taking leave and working fewer hours was linked to greater involvement with the baby (Tanaka and Waldfogel, 2007). In particular, the results showed that fathers who took leave after the birth were 25% more likely to change diapers and 19% were more likely to feed and get up at night. Fathers working long hours, on the other hand, had low levels of involvement.

Case study: In 2000, the Netherlands passed the Working Hours Adjustment Act, which allows workers to choose to reduce their hours of work without losing their jobs (Jacobs, 2004). Employers are required to grant these requests unless they can show financial hardship—some 96 percent of requests have been accepted. Workers then cut their hours and earn less but retain the same hourly rate of pay. Their benefits (e.g. pensions and vacation time) are pro-rated and they continue to receive full health care (while paying somewhat less for it). This is an extremely popular program and the Netherlands now has the world's highest level of part-time workers. It is very common in families with children for husbands to work four days a week and wives to work three. The popularity of the law has led to its also being adopted in Germany and Belgium.

Possible barriers: Many workers fear that their career prospects may be affected if they take leave that they are entitled to (Conference Board, 1994). In addition, workers on lower incomes will not take leave if it is unpaid (Cantor et al., 2001).

Recommendation 13: Giving workers heading for retirement a five-year window, so they may decide when it is best for them to retire and make appropriate plans (Bok, 2010).

People who took voluntary retirement have higher wellbeing than those with mandatory retirement (Kimmel, Price and Walker, 1978). Having time to plan retirement will allow workers to adapt better to their new status.

In addition, a system of phased retirement could allow workers to retire gradually, while still remaining on the job for part of the time. This could be

made possible by laws allowing parts of one's pension or social security to be received earlier. Such a program would allow older workers to stay on the job longer (reducing the impact on pension programs) while also opening new jobs for younger workers and allowing the older workers to mentor them. Some organizations, notably many universities and colleges, already do this.

Individual growth and improving the quality of time use

Recommendation 14: Develop policies that enhance peoples' control of their time. Policies should be developed that give workers as much decision-making in matters that affect their time use as possible. Whenever possible, individuals should, at the least, be consulted in these matters. When done appropriately, this leads to both greater satisfaction and greater and production both in the short- and, especially, in the long-term.

Recommendation 15: Provide opportunities for enhancing individual growth and wellbeing

In order to achieve a meaningful time use that leads to happiness, self-congruent goals are needed. Time spent in order to formulate those goals is generally neglected in our societies. However, personal growth happens during pauses in life when people exercise mindfulness to reach a new creative balance between their personal values, life goals, and life circumstances by choosing a way that is subjectively experienced as the best choice in a given situation, which is a way to meaning (Längle, 2007). In order to encourage good time use and prevent burnout, Längle (2003, p.141) suggests to question oneself: "Why am I doing this? Do I like doing this? Do I get something out of this activity right now? Do I want to live for this – will I want to have lived for this?"

Possible measures include supporting organizations that provide opportunities for breaks during the workday (the worker is free to choose the time), providing tax benefits to organizations that offer psychological support or free coaching sessions to their employees.

Recommendation 16: Provide education and counseling for enhancing balanced time use

Policies may also be formulated to encourage a more balanced time perspective. Integral profiles of time perspective are more strongly associated with happiness and wellbeing than individual dimensions (see Boniwell et al., 2010, for a review). The happiest people are those with a balanced time perspective (those who are able to balance the present-day enjoyment with sacrificing their time to long-term goals). Balanced time perspective is associated with more beneficial time use. This can be enhanced by means of public social

advertisements and by means of policies that encourage a longer-term perspective and thinking in countries with strong hedonism and materialistic values, and policies that encourage people to enjoy present day in countries with strong future perspective. Overall, these policies fall into categories described for the above subdomains, but they need to be differentiated by countries and social groups and based on the results of empirical studies of time perspective and values in different groups, in order to develop approaches towards the balance.

Recommendation 17: Encourage critical thinking about the influence of media on time use

Free time has increasingly been devoted to television viewing and other passive, often mindless, electronic media activities. It has been demonstrated, however, that these activities do not give us much pleasure and is associated with boredom, a low level of concentration, a low level of potency, lack of clarity of thought and lack of flow (Csikszentmihalyi, 1992). In addition to education about these realities, policies that limit the delivery of mindless, passive television and other media use in young children, especially those exploiting their inability to think critically, are exploited may be developed. It is also important to encourage active undertakings during leisure time.

Other possible measures associated with TV viewing are banning of TV advertising for children and limiting advertising for adults (Gaucher, 2012, p.63; Kasser et al., 2004), introducing a clear border between TV programs and advertising + no increase in sound level, progressive TV tax depending on time spent watching, introduction of public health promotion campaigns on the dangers of young children exposure to TV. Time use research on re-directing of free time suggests that simply freeing up working time will not automatically result in increased wellbeing unless measures are taken to dramatically reduce TV watching and other passive media activities.

More generally, policies should help to encourage critical thinking about the limitations, costs and other consequences of materialistic values and how they are promoted. Kasser (2006) suggests that in order to increase people's resistance to materialistic values, they could be taught to view commercial advertising more critically. The rationale behind such "media literacy" programs is that if people are made aware of the techniques used in advertising and how these are used to influence perceptions, emotions and beliefs, then people may be less vulnerable to the automatic processes that advertisers employ in order to sell their products. In conjunction, taken together, these measures can enhance the quality of peoples' decisions concerning how they use their time.

Sleep quality

Recommendation 18: Introduce measures to improve sleep quality

Sleep quality is one of the strongest predictors of enjoyment of activities the next day (Kahneman and Krueger, 2006). Noise can lead to qualitative, rather than quantitative sleep deprivation (Freedman et al., 2001) which may affect psychological wellbeing, although the long-term detrimental effects of night-time noise on health are still not shown (Muzet, 2007). Legal measures can be taken to avoid sleep disturbances resulting from noise (e.g., construction, traffic, loud public activities).

Systematic tracking of time use

Recommendation 19: Systematically monitor time use

Systematic monitoring of individual and group-level time use, and peoples' perceptions of the value of their activities, should be mandated (see section II.I). These data are essential to formulating policies that maximize the wellbeing of workers as well as their families, employers and communities.

Summary and Conclusion

The present chapter reviewed the literature and offered policy suggestions concerning the issues of time use and time balance as they relate to wellbeing both on the individual and societal levels. It has attempted to underscore the importance of individual-level variables such as conscious choice, the perception of control, focus upon intrinsic goals (helping other people, establishing relationships, developing and growing as a person, maintaining health and balance in one's life), and being sensitive to individual, cultural and situation-specific differences. The evidence supports the thesis that societies that care about healthy time use at the individual level also benefit as a whole. Although caring about people's wellbeing may not bring a strong short-term increase in productivity, it is a more psychologically sustainable way of social existence that has long-term benefits and is a new step towards creating an economics based on human development, rather than exploitation.

In conclusion: Good time use is use of time in ways that are seen as meaningful and self-congruent and that benefit one's family, employer, community and the larger local and global environment.

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