



## Beyond time management: time use, performance and well-being<sup>1</sup>

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**Abstract.** In this review questions such as “What is a good use of time?”, “How can one achieve satisfaction with their time?” and “How can one’s relationship with time contribute to their well-being?” are raised and discussed with regard to empirical research on various aspects of positive psychology of time. This paper differs from traditional approach to thinking about time in organisations in three substantial ways. Firstly, it reviews the existing empirical research on time use, focusing on the implications of this research for organizations and individuals. Secondly, it highlights the limitations of believing that time is infinitely stretchable and defined good time use as one that results in increased well-being, rather than productivity at the expense of well-being. Thirdly, although the workplace is in the centre of the paper, we view time use from a broader perspective of life and work-leisure balance. A range of evidence is considered, based on both objective and subjective time use studies, suggesting specific measures to increase well-being through time use, first of all, at workplace, but also touching on other domains, such as media, leisure, etc. Based on Self-Determination Theory, we argue that good time use results from choosing activities that help people to satisfy their basic needs and are directed at intrinsic goals (helping other people, establishing relationships, developing and growing as a person, maintaining health and balance in one’s life). A pathway to increase basic need satisfaction and, as a result, happiness associated with good time use, is by supporting autonomy: giving people more opportunities for choosing and working towards goals that are self-congruent and intrinsic, benefitting both themselves and societies.

**Keywords:** time management, time use, satisfaction with time use, time use and well-being, positive psychology of time, time affluence, balanced time perspective

### Introduction

Time is an important and limited resource, and the way people utilise it has dramatic consequences for their well-being and performance. As Robinson and Godbey (1997) put it, ‘Time has become the most precious commodity and the ultimate scarcity’ (p. 25). Recurrent issues in world-wide time use surveys include the lack of leisure time, the demands of jobs that require more than full-time commitment, the guilt of parents about the quality and quantity of time spent with their children,

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and failed attempts to find a balance between family and work needs (Daly, 1996). In Britain, a 1995 poll of workers showed that over 70% wanted to work 40 hours or less per week, while only 40% did. 31% of full-time workers felt dissatisfied about the impact of their working hours on family and leisure (Mulgan & Wilkinson, 1995). 48% of French people would like to be able to stop time, if only for a couple minutes a day, whilst when it comes to Parisians, they feel they would need four additional hours a day to complete what they have to do (Georget, 2013).

Despite the proliferation of time management books, most empirical studies in this domain are studies of objective distribution of time of individuals across different types of activities, such as productive work, house work, commuting, personal care, sleep, different types of leisure (Juster & Stafford, 1991; Pentland et al., 1999) that are investigated as predictors of a number of outcomes, including overall happiness or life satisfaction. A number of studies in this paradigm, such as the European Quality of Life Survey of 2003, have demonstrated correlations between the objective distribution of time and happiness. In the majority of the countries surveyed, individuals who had a poor work-life balance and worked long hours had lower levels of well-being (Böhnke, 2005). Overall, there is a vast array of data suggesting that the way people use time is strongly associated with well-being and happiness. However, it appears that the *actual use of time* does not predict happiness as strongly as does *satisfaction with one's use of time* (e.g., Robinson, 1983; Lawton, Moss & Fulcomer, 1986; Clark, Harvey & Shawn, 1990; Boniwell, 2009).

The aim of this paper is to review the most prominent areas of time use research, including work time and non-work time, subjective aspects of time use and time management, summarising major research findings and considering the implications of these findings for employment practices, coaching and training of personnel, as well as for individual employees themselves.

### **Work and leisure time: The challenge of finding a balance**

The International Labour Organization (ILO, 1919) has set working limits at 48 hours per week (eight hours per day) for manufacturing. Working beyond this limit is considered to be unhealthy, as longer hours are associated with stress and ill health (Spurgeon, 2003). Individuals who are overworked (working more than eight hours) may be in danger of time deprivation. Huge disparities are common with regard to time, with U.S. citizens working on average 1900 hours per year, in contrast to 1400 hours for citizens in Norway and the Netherlands (Hayden, 2003). The U.S. and Japan are top the list of countries famous for long work hours, as exemplified by the terms "workaholic" and "karoshi" (Levine, 1997).

In other countries, policymakers introduce caps on working time, in attempt to encourage job-sharing. For instance, in 2000, the French government introduced a 35 hours legal limit on the maximum working week (vs. 39), aiming to reduce unemployment, gender inequality and enhance work-life balance (Fagnani & Letablier, 2004). Research into the effects of the 35-hour week has produced mixed results (Askenazy, 2004; Fagnani & Letablier, 2004), including 2–3% loss of compensation for management and sales personnel, increase in leisure time and an overall perception of work-life balance, especially for women with young children, lower commute time, less fatigue, better quality of time, increased engagement/motivation of employees, and increase in productivity. Middle- and higher-income groups employees with more control over their work schedules were more likely to welcome this change. However, despite the government's claims of 350,000 new jobs created as a result, the net effects on employment are uncertain (Estevao & Sa, 2006).

Although the majority of European nations already reduced annual work hours in response to popular demand (Hayden, 2003), survey findings reveal that 50 per cent of European Union workers would prefer to further reduce their working week to 34 hours and would be happy to

accept a corresponding reduction in their salary (Cote, Simms, & Franklin, 2010). Similarly, the evidence shows that there is an increase in well-being as the hours worked rises, but only up to a certain point before it starts to drop as hours become excessive, thus showing an inverse u-shaped between life satisfaction and hours worked (Meier & Stutzer, 2006). The European Quality of Life Survey reveals a strong correlation between time use and subjective well-being, finding that people who had long work hours generally have low subjective well-being (Böhnke, 2005). However, the psychological impact of work hours is likely to vary depending on whether the number of hours worked is voluntarily chosen. Long commute to work is also universally associated with reduced well-being (Robinson & Godbey, 1997; Stutzer & Frey, 2005).

The area of *work-life balance*, concerned with enabling working people to effectively manage the demands of work and home undoubtedly touches on time use. Clutterbuck (2003) defines work-life balance as: a) being aware of different sometimes conflicting demands; b) having the ability to make choices in the allocation of time and energy; c) knowing what values to apply to choices and d) making choices. The concept of work-life balance is widely used in policy, managerial and organisational discourse. Its proliferation resulted in the introduction of family-friendly policies and other work-life balance initiatives in the work place, such as: flexible and part-time working; extended leave and other time off arrangements; increasing levels of family support (partner benefits, childcare facilities); subsidising private healthcare, etc (Woodland et al, 2003).

Better work-life balance may be achieved by means of alternative worktime arrangements, which may allow employees to use their time more efficiently. An example is provided by the state of Utah in the USA, where a mandatory four-day week for public sector workers was introduced in 2008 in order to save energy and cut carbon and costs, shifting the standard week from five 8-hour days to four 10-hour days, Monday to Thursday. At the end of the year, more than half employees said they were more productive under the new working regime, and three-quarters preferred the new arrangement. Reductions in absenteeism and overtime saved the state £4.1 million dollars. The four-day week also helped reduce carbon emissions and petrol consumption: miles travelled in state-owned vehicles dropped by 3 million, saving Utah \$1.4 million over the first year. 82% of employees wanted the four-day week to continue when the year was up (Cote, Simms, & Franklin, 2010).

Importantly, when considering the impact of the hours of work on well-being, we must take into account the more psychological factors of perceived work quality and work satisfaction. A satisfactory working environment is characterised by good social relations at work and carrying out work that is of interest (Diener & Seligman, 2004; Csikzentmihalyi, 1997). Between 1989 and 1997, world-wide levels of job satisfaction declined and then rose back to 1989 levels only by 2005. It appears therefore that job satisfaction does not fluctuate in line with GDP (that continued rising). Consistent with these findings, in 9 of 15 OECD countries, job satisfaction fell or was flat between 1997 and 2005 (Clark et al, 2008). Low levels of job satisfaction may indicate that the work stops being a source of psychological need fulfilment and predict burnout in the longer term (Maslach, Schaufeli, Leiter, 2001).

Having time to spare is associated with paradoxical findings. Even though people are desperate for more free time, when they get it, they sometimes do not know what to do with it. Mulgan and Wilkinson (1995), for example, argue that retirement may bring with it a sense of isolation and depression, unemployment is associated with a significant decrease in well-being, mainly through loss of income and structure to the day (Jahoda, 1981, Bond and Feather, 1988). Unemployment is generally associated with lower motivation, confidence, sense of control and self-respect (Sen, 1997). Numerous studies have also found that job loss has a negative effect on life satisfaction, and even after reemployment life satisfaction does not return to pre job loss levels (Clark et al, 2008). This long term effect on life satisfaction has been termed the “scarring effect” of unemployment,

referring to psychological harm caused by job loss (Darity & Goldsmith, 1996; Clark, Georgellis, & Sanfey, 2001). These findings show that few unemployed people find their additional leisure time very satisfying.

Leisure time (usually assumed to be superior to work time and associated with happiness: Lane, 1995) is characterised by two tendencies — increase in passive leisure and intensification of time devoted to active leisure. First of all, increases in free time have been found to be largely devoted to television viewing, even though it's rated relatively low in terms of pleasure and was found to be associated with boredom by some researchers (Csikszentmihalyi, 1992), though not all (Haworth, 1997). While nearly a third of all free time (in average three hours per day) is reported as being spent in front of the television (Tyrrell, 1995), significantly less time is spent engaging in activities usually rated as the conducive to happiness, such as socialising and outside activities. However, when people do engage in active leisure, it often becomes subject to the phenomenon of time deepening – cramming a larger number of activities into a shorter amount of time. Time deepening assumes that it is better to do as many activities as possible within a given amount of time, rather than following an “either-or” principle and engaging in one activity only. Time deepening is achieved by speeding up activities, choosing the activities that can be done quickly over those which take more time, doing more than one thing at once and deciding on leisure activities with regard to how much time is going to be spent. This phenomenon can be paralleled with the maximisation tendency, described by Schwartz (2004) as one of the modern evils. While time deepening may have some advantages in terms of accomplishment, it can result in feelings of fragmentation and time strain (Robinson & Godbey, 1997). Russell wrote: “To be able to fill leisure intelligently is the last product of civilization, and at present very few people have reached that level” (cited in Lane, 1995, p. 16). So whilst free or leisure time is paramount to well-being, the way we use it matters much more than we think.

Policymakers and employers can facilitate individual employees in achieving a right work-life balance by creating social conditions that discourage overwork, while allowing individuals to achieve their work and life goals without sacrificing their leisure. However, social interventions and policy measures based on a “one size fits all” principle can only be effective to a limited extent. The following section will focus on the individual differences that affect the ways specific patterns of time use reflect upon well-being.

### **The role of the individual: Time use, time management, time perspective**

When talking about *time use*, two substantial lines of research can be contrasted: approaching time use objectively, i.e. through calculating daily time expenditure, and subjectively, i.e. relying on a person's own perception of their time use. Whilst the so-called objective time use research, such as time diary studies widely used in social sciences, provide multiple insights, other empirical examples demonstrate that the focus solely on objective time and its expenditure, rather than subjective time, gives an insufficient representation of a) objective outcomes of activities (e.g. achievement of a desired outcome); b) psychological states; c) the meaning people assign to the ways they spend their time; d) the relationship of time use with constructs such as well-being (Boniwell, 2009). Subjective time use domain deals with what people think and feel about their time use (whether they experience time pressure, time anxiety, feeling in control, satisfied or dissatisfied with their time), not only with what they actually do, and includes constructs such as time affluence, satisfaction with time use and time perspective.

Kasser and Sheldon (2009) highlight the similarities between time and money, which we can “save,” “spend,” and “waste”, equating both to limited resources. Just as with money, some people can be seen as wealthy or poor with regard to time. *Time affluence*, or the feeling that one has enough

time, is considered to be a significant predictor of happiness (SWB), possibly through allowing one to engage in the experiential activities that facilitate personal growth, relations with others and community involvement (Lyubomirsky et al., 2005; Kasser, 2002) and through greater levels of mindfulness (Brown and Ryan, 2003). On the other hand, time poverty can significantly reduce well-being levels, through problems such as cognitive overload and feelings of pressure, which can affect one's ability to be present in the moment (Brown & Ryan, 2003) or relate to others (de Graaf, 2003). 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 & Sheldon, 2009).

Subjective *satisfaction with time use* is emerging as one of the strongest predictors of well-being. For instance, subjective work-life balance (the feeling that the distribution of time investment into work and personal life than a person makes is right for him/her) is a much stronger predictor of well-being, compared to objective work-life balance (the exact ratio of the number of hours spent on work and leisure), and dissatisfaction with work-life balance does not always relate to the number of hours a person works (Roberts, 2007; Boniwell, 2009). Pentland et al. (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 and other indices of well-being. 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 & 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). The following factors appear to underlie satisfaction with time use: liking what one does and perceiving it as worthwhile, achieving a sense of balance, taking responsibility for one's time, achieving something on the daily basis, feeling in control of one's time and limited time anxiety (Boniwell, 2009).

The actual content of activities we fill our time with also matters to our satisfaction with time use. Self-determination theory (Ryan & Deci, 2000) postulates three basic psychological needs for autonomy, competence, and relatedness. Time spent doing activities that result in basic need satisfaction (these activities involve acting in line with our selves, learning and growing, or connecting to other people) is experienced as more positive and satisfying than time spent on activities that do not help to meet these needs (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000) or are directed at other needs, such as the need for self-esteem or money (Sheldon, Elliott, Kim, Kasser, 2001). Kasser and Ryan (1996; 2001) have shown that individuals who value intrinsic goals (such as helping other people, learning and growing, close relationships, health) are more likely to invest their time in activities that satisfy basic psychological needs and lead to higher well-being, in contrast to individuals who value extrinsic goals (such as social recognition, financial success or attractive appearance).

There are also important individual differences in the perception of time, temporal preferences and styles of time use. *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 & Zimbardo, 2003; Stolarski, van Beek, & Fieulaine, 2015). Data suggest 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).

*Polychronicity* and *monochronicity* refer to personality styles of time use. Polychronic people are able to engage in many activities at the same time, whilst monochronic time use refers to coping with one task at a time. Monochronic people like to work from start to finish in a 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. In fact, polychronicity goes beyond what is popularly known as “multi-tasking”, focusing on the completion of human transactions rather than keeping to schedules. For example, two polychronic 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 if their partner were to abruptly terminate the conversation before it came to a spontaneous conclusion. In the situation of multiple demands on time people may choose to adopt polychronic time use as an additional strategy for meeting them (Kaufman, Lane & Lindquist, 1991).

Another dimension of temporal preferences is *morningness* — *eveningness*, which reflects individual differences in the preferences for situating one’s activities during the daytime (Cavallera & Giudici, 2008). Empirical studies tend to find higher well-being in morning-oriented individuals (Randler, 2008), although the exact causes of this association (physiological or social) are yet to be investigated.

The notion of *time management* falls somewhere in-between the objective and subjective time use paradigms, as it tends to endorse the view of time that is concerned with its objectification and utilization, seeking to change one’s actual established time use behaviours. Yet, differently from time diary research, most of time-management inventories take the form of attitude surveys, and thus rely on one’s subjective evaluation of their time-related actions.

The term time management first appeared in literature in the early 1930s, and was primarily applied to those in middle and upper-management positions in private companies. Larsson and Sanne (2005), who set themselves a task to content-analyse the advice of major self-help books on avoiding time shortage, identified six core categories of time management strategies: streamlining tasks (finding how to do the same task using less time), buying household services, minding one’s basic needs (including food, exercise, time for hobbies), setting limits in relation to others (learning to say no, sharing household responsibilities with family members), setting limits to time-consuming aspirations (effectively lowering aspirations and striving towards satisficing), and using effective change methods.

Although time-management programmes are widespread and popular (e.g. Lakein, 1973), the evaluation of them has been extremely limited and has rarely looked at the effects of such training on actual time-management behaviours (Claessens, 2004). The only systematic review of time management literature to date has identified the total of 32 empirical studies on time management conducted between 1982 and 2004 (Claessens et al, 2007). The review demonstrates that although time management behaviours relate positively to perceived control of time, job satisfaction, and health, and negatively to stress, the relationship with work and academic performance is not clear. Time management training seems to enhance time management skills, but this does not automatically transfer to better accomplishment. The majority of studies utilised self-reports and few addressed the question of improvements in objective outcomes (Hanel, 1982; Hall & Hirsch,

1982; Bost, 1984). Those that did have found that time management training has little or no effect on time management behaviours, job satisfaction or performance (Macan, 1994, 1996; Macan et al., 1990). These are astonishing findings, taking into account the financial and otherwise resources invested by companies into time management training. Perhaps, the failure of time management training to produce desired results may be attributed to basing it on the objective paradigm of time and thus focusing on the wrong thing – behaviour rather than psychology of time.

## **Implications for practice**

When considering practical strategies for ameliorating time use, we will take into account the existing research findings from the area, in combination with those coming from research on goals and intentional activities (Lyubomirsky et al., 2005; Brunstein, 1993; Sheldon, 2002; Sheldon & Elliot, 1998, 1999; Sheldon & Kasser, 1995, 1998), with the following principles coming to the fore:

**1. Supporting autonomy/control.** When it comes to increasing happiness that results from balanced time use, work conditions promoting the opportunities for choice are expected to be more effective than those promoting specific behaviours. Thus, providing people with more autonomy and control in different life domains encourages them to engage in consciously chosen activities, rather than those imposed upon them, leading to the higher quality of time spent. In fact, we can go as far as to maintain that work conditions promoting the opportunities for choice are expected to be more effective than those promoting specific behaviours.

**2. Supporting relationships/relatedness.** Enabling more temporal 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 well-being.

**3. Supporting 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.

**4. Supporting meaningful engagement.** Good time use is use of time in ways that are seen as meaningful and self-congruent. Intrinsic and meaningful activities are rewarding and support happiness, whereas extrinsic activities drain us and lead to unhappiness. For instance, intrinsically motivated work or a work directed at a higher cause may be beneficial to a person even if he/she is working a reasonable amount of overtime hours; whereas a person doing a boring and meaningless work for money may be unhappy with his/her work-life balance even if the number of hours worked is very small. Providing people with more opportunities to engage into activities that are synergic will benefit their own well-being and that of other people and society as a whole.

The following three sub-sections propose some practical time use solutions and suggestions, focusing either on the employer/employment policy maker, a coach or trainer or an individual, as the bearer of action.

### **1. Positive employment practices**

***Placing reasonable caps on overtime hours or incentives to businesses to reduce overwork (e.g., by fixing minimum reward for overtime).*** Working long hours is associated with a wide range of adverse health outcomes and increased safety risks, as well as lower psychological well-being (Nishiyama & Johnson, 1997; Burke & 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

& van Tienoven, 2011) and working mothers (Scarr, Philips & McCartney, 1989). Kasser (2006) suggests placing reasonable caps on the maximum number of hours a person can work, providing workers with a right to refuse overtime after a certain number of hours on the job per week. This can 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.

***Providing incentives for employers to encourage their employees undertake work from home and/or to choose their work schedule.*** A large number of studies indicate the benefits of autonomy at work (review in Gagné & Bhave, 2011), which is associated with higher employee engagement, well-being, and work performance in different work contexts and cultures. Ability to influence or determine one's work schedule, extent of engagement, location of work and type of work is associated with increased well-being and higher work-life balance. The work from home has multiple benefits, including lower commute time, decrease in fuel use, and higher commitment to employer, 60% of time saved from transportation given to employer. 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 & 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. 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 & Fenwick, 2001). However, there is evidence that working from home in combination with a tendency to overwork may be detrimental to home life (Crosbie & Moore, 2004).

***Facilitating the creation of small businesses to provide people with more autonomy in the work domain.*** The finding that self-employed individuals have higher levels of job satisfaction than employees has been consistently demonstrated across Europe (e.g. Blanchflower & Oswald, 1998; Blanchflower, 2000, Benz & Frey 2004, 2008, Clark & Senik, 2006), as well as in the USA and Canada (Hundley, 2001; Benz and Frey, 2004). Benz and Frey (2004, 2008) explain that it is the factor of work autonomy that is primarily responsible for higher levels of job satisfaction amongst the self-employed. Gagné and Bhave (2011) review the findings that show that autonomy at workplace is associated with higher employee engagement, well-being, and work performance in different work contexts and cultures.

***Giving workers heading for retirement a five-year window, in order that they can decide themselves when it is best for them to retire.*** People who took voluntary retirement report to have higher well-being than those with mandatory retirement (Kimmel, Price & Walker, 1978). Having time to plan retirement will allow workers to adapt better to their new status (Bok, 2010).

***Helping unemployed people to find meaningful activity that could contribute to society.*** There is substantial evidence demonstrating that unemployed people have worse mental health and more signs of psychological distress compared to employed people and other non-economically active groups such as students, retirees or home-makers (Dooley, Fielding & Levi, 1996; Lennon, 1999; McKee-Ryan & Kinicki, 2002; Ohayon et al, 1999). Furthermore, findings also show that unemployment does not only correlate with psychological distress, but actually causes it (Murphy & Athanasou, 1999). Unemployment does not just result in a loss of an income, individuals also face other losses, such as social relationships, their identity in society, self-esteem and participation in societal and community events and activities (Galatzer-Levy et al., 2010; Jahoda, Lazarsfeld & Zeisel, 2002). Unemployed people have lower well-being (McKee-Ryan et al, 2005), have less opportunity to use their time in a meaningful way and do not have incentives to do so. It is important to provide



opportunities and encourage people who lost their job to engage in meaningful activity, in order to prevent the long-term effects on well-being (Lucas et al., 2004). Interventions that provide meaning and self-concept can be effective (Turner, Kessler, House, 1991; e.g., Vastamäki, Moser, Paul, 2009): for instance, setting shared office spaces for unemployed people to share projects, have a structured time framework, helping them to create social networks.

***Providing opportunities for volunteer work and civic engagement.*** Volunteer work is a result of conscious free choice guided by values and self-congruent goals (Gagné, 2003), and it is an activity that benefits psychologically both the recipient and the helper (Weinstein & Ryan, 2010). Findings from a large longitudinal panel study indicate that volunteer work in the community enhances happiness, life satisfaction, self-esteem, sense of control, and physical health (Thoits & Hewitt, 2001). Millette & Gagné (2008) found that autonomous motivation was a mediator in the association between job characteristics and satisfaction and suggest that volunteer job should use team work and establish contacts between volunteers and clients, volunteers and colleagues, as well as provide opportunities with decision-making power and a meaning of their work (mission of the organisation).

***Promoting physical exercise at work.*** Current research suggests that physical inactivity at work may have been a significant factor contributing to the obesity epidemic (Church et al., 2011). Obesity and related physical illnesses decrease performance of workers (Ricci and Chee, 2005; Goetzel et al., 2010) and increase health care costs (Aldana, 2001; Golaszewski, 2001). Empirical evidence examining the effects of physical activity on employee productivity found a positive correlation between exercise and quality and quantity of performance. Many studies have also demonstrated fitness programmes decreasing sickness absence (Tomba, 2002). In addition, Coulson et al. (2008) found that the days in which employees exercised in the company gym, their self-rated job performance and mood was higher compared to the days they did not exercise. Charness and Gneezy (2009) employed the use of incentives, where individuals were paid to exercise. The findings showed that individuals who were previously inactive continued to exercise once the payments had stopped. Evidence also demonstrates the many benefits of walking such as reducing stress, increasing the size of the hippocampus and improving memory (Erickson et al., 2011) and therefore facilitates the execution of cognitively demanding tasks (Falkenberg, 1987). There has been some research demonstrating that simple interventions such as walking stairs, walking during breaks do lead to an increase in physical activity at work (Emmons, 1999; WHO, 2002).

Encouraging employees to engage in physical activity is a useful strategy, as there is evidence showing that it is cost effective (Hagberg & Lindholm, 2006). Regularly exercising has shown to improve mental health (Paluska & Schwenk, 2000), buffering from depression, anxiety and stress (Strohle, 2009). Furthermore, symptoms of fatigue are reduced and it has found to positively impact mood (Fox, 1999) quality of life (Brown et al., 2003) and life satisfaction (Fox, 1999). Importantly, burnout and anxiety is reduced better with physical and relaxation exercises compared to a cognitive intervention (Van Rhenen et al., 2005). Research examining incidental physical activity at work (e.g. increasing stair use), physical activity during leisure time and reported positive relationships between physical activity and job satisfaction and psychological well-being (Coulson et al., 2008). Finally, it was established that exercise was negative associated with job demands, such as time management difficulties and output demand (Burton et al., 2005). There is strong evidence indicating that physical activity positively impacts employee well-being, which is promising as it is a cost-effective strategy that can be employed to promote a healthy, valued and productive workforce.

***Removing unnecessary administrative barriers and paperwork in different domains.*** Administrative barriers lead to time spent on coping with bureaucratic obstacles and this time is not associated with basic need satisfaction. As a result, every bit of paperwork has its psychologi-

cal price, and excessive paperwork may undermine well-being. Although systematic studies of this sort are difficult and virtually non-existent, countries differ strongly in the number of hours people spend coping with administrative barriers. For instance, the time required to start a business ranges from one day to 144 days (World Bank, 2015) but is generally limited to 14 days in most developed countries, which have the highest well-being levels. Psychologically, the time spent producing paperwork necessary to justify and support one's actions is often perceived as meaningless and lost. Time expenses on bureaucracy reduce the amount of time employees can spend on productive activities that satisfy basic needs and increase happiness and performance.

## 2. Implications for executive coaching and training

**Helping clients to improve sleep quality.** Sleep quality is one of the strongest predictors of enjoyment of activities the next day (Kahneman & Krueger, 2006). Noise can lead to qualitative, rather than quantitative sleep deprivation (Freedman et al., 2001) which may affect psychological well-being, although the long-term detrimental effects of night-time noise on health are still not shown (Muzet, 2007). One of the primary foci of coaching can therefore be on raising the awareness of the importance of sleep and helping clients to think through the adjustments of their sleeping conditions.

**Approaching generic time management advice with caution.** As already discussed, time management strategies and practices may not be a panacea for time anxiety, most likely because their focus is on changing the behaviour (through learning techniques), rather than on more psychological aspects of time use, and on efficiency rather than satisfaction. In fact, some time management practices, such as performing more activities in less amount of time, may lead to the feelings of time deepening and time intensification. Therefore, rather than advocating generalised time management strategies, which are based on behavioural interventions and frequently follow a "one size fits all" principle, research points towards developing interventions based on an understanding of an individual's specific temporal needs.

**Assisting clients in establishing their time perspective profile.** Coaches can identify their client's dominant time perspective (TP) and those that are underdeveloped. Client's TP profile can be measured using the 56-item ZTPI (Zimbardo & Boyd, 1999). Alternatively, coach's own questioning and observation skills can be used to determine client's temporal preferences. A key coaching point is often reached when the client becomes aware that a certain way of looking at things is linked to a certain habitual response. A current way of thinking may be based on being stuck in a temporal orientation that is not appropriate for the situation. Highlighting the disadvantages of an over-dominant TP may help the client to shift their perspective (Boniwell & Zimbardo, 2004; Boniwell, Osin, Sircova, 2014; Boniwell, Osin, 2015).

**Helping to find temporal balance.** The associations between time perspective and well-being differ strongly across studies; however, recent research suggests that integral profiles of time perspective are more strongly associated with happiness and well-being than individual dimensions (Boniwell et al., 2010; Stolarski, Wiberg, Osin, 2015). 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 further associated with more beneficial time use. Coaching clients to be more flexible in shifting between the past, present and future mindsets can be liberating. Coaching can enable the clients to stay focused on one temporal dimension when this is what is needed, and to "switch off" when appropriate. Development of such flexibility coupled with encouraging a longer-term perspective can contribute to development of a more balanced time perspective (Boniwell, Osin, Sircova, 2014; Boniwell, Osin, 2015).

***Appreciating that work-life balance is a subjective notion.*** Haworth (2004) notes that it is virtually impossible to say what a healthy work-life balance is. As discussed above, balanced use of time does not mean equal allocation of time to work and leisure, or investing more time into leisure. A sense of balance is subjective and varies greatly between people. Thus an intervention may need to centre on organising an individual's activities on the basis of what they perceive to be a balanced time allocation, focusing on identifying some time for themselves on a frequent if not daily basis, and on clarifying one's position with regard to work-leisure boundaries. If internal conflicts are identified, psychotherapeutic referral may be deemed appropriate (Boniwell, 2009).

***Distinguishing between being busy and time pressure.*** The majority of people report liking to be busy, with up to 70% of French nationals inclined in this direction (Boniwell, 2009; Georget, 2013). It is likely that busyness might be intrinsically stimulating, at least up to a certain point, through presenting one with an opportunity to engage in a wider variety of activities. Nevertheless, Freedman and Edwards' (1988) experimental findings of an inverted-U relationship between time pressure and performance offer an explanation as to why it may become counterproductive beyond a certain point. 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? Self-reported happiness appears to be highest in people who are less rushed *and* have less excess time. So whilst being busy is positive and can be encouraged, an external viewpoint is often necessary to help recognise the point when time pressure enters a dangerous range, impeding performance and well-being.

***Appreciating the complexities of work-life boundary systems.*** Although commonsense and time management books alike often offer advice on how to clearly separate working and home life, there is little empirical underpinning for such a conclusion. Nipper-Eng (1996) relates different boundary management approaches to personality type. Thus, for example, for the integrator, the categories of work and leisure overlap and therefore the boundaries are blurred. The segmentator, on the other hand, approaches them as strictly separate, with everything belonging to either the work or home domain. Brown and Adebayo (2004) note that these strategies may be context-dependant by reporting that employees at higher levels have fewer boundaries between their work and home.

### 3. Implications for individual employees

***Assuming responsibility.*** Taking responsibility for one's time means adopting a proactive rather than reactive attitude in relation to it, preventing oneself from feeling over stressed. Atchley quotes a man in his eighties saying: "You become free of time when you realise that time is in you, not you in time" (2001, p. 168). This statement implies taking responsibility for time, rather than allowing it to run one's life. However, assuming responsibility over one's time may require a shift in one's attitudes that needs to be carefully supported. This is standard practice in some types of psychotherapy (e.g. Motivational Interviewing), but to the author's knowledge this has rarely made its way into time management programmes.

***Choosing green.*** Viewing natural, rather than urban scenes promotes health by increasing our ability to withstand pain, reducing blood pressure and speeding post-operative recovery, as well as reducing physiological signs of stress (Diette et al., 2003; Laumann, Garling & Stormark, 2003; Parsons et al., 1998; Ulrich, 1984). A number of studies (Hartig et al., 1996; Hartig, Mang & Evans, 1991; Hartig, et al., 1997; Hartig et al., 2003) show that viewing natural rather than urban scenes leads to subjective well-being increases in happiness and better affect balance (ratio of positive to negative emotions), which is why choosing to spend time in natural environments whenever possible may contribute to feeling more in balance with our time.

**Choosing exercise.** Above, we have already reviewed the extensive evidence concerning physical activity and work performance. The existing findings indicate that regular exercise is beneficial for well-being and prevents depression, whereas a lack of physical activity causes many health problems obesity and psychological problems (WHO, 2002). Although much can be achieved by creating the necessary conditions for exercise, engaging in it is still fundamentally the choice of the individual him/herself.

**Choosing pro-social, creative, and educational over passive leisure.** Time use research on re-directing of free time suggests that simply freeing up working time will not automatically result in increased well-being unless measures are taken to dramatically reduce TV watching. Unfortunately, to date all the increases in our free time have been devoted to television viewing. Currently, the average daily time spent in front of TV is 3 h 32min in France, 4 h in the UK and 5 h 11 min US, accounting to ten years of watching TV vs. nine years of working in an average lifetime. TV viewing does 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, lower flow, higher materialism, fewer social ties, lower sleep, and higher fear of death, higher obesity, and increase in upwards social comparison (Csikszentmihalyi, 1992; Desmurget, 2012). The only exceptions to this are television programmes that connect people and provide them more opportunities for personal growth (e.g., educational programmes). On the other hand, community participation facilitates interaction in the course of meaningful activity, create social ties, increase well-being as a result of self-expression. In adolescents, involvement in structured group activities is associated with increased civic involvement and increased sense of community, which, in turn, predicts social well-being (Albanesi et al., 2007).

**Choosing opportunities for self-reflection and personal growth.** In order to achieve a meaningful time use that leads to happiness, self-congruent goals are needed (Brunstein et al., 1998). 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 questioning 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?”

**Accepting the limits of time management.** The idea that we can get it all done is the biggest myth in time management. It appears though, that the problem in relation to time crunch lies not in the amount of time available, not in having to manage it successfully in order to squeeze out an extra hour of a day, but in learning how to balance time in such a way that it contributes to one’s well-being and satisfaction with life. But what is a good use of time? How can time be used so that it does contribute to well-being? How can the experience of time pressure be avoided so that time is no longer perceived as an enemy? How can one find a balance between work and leisure and satisfaction in both? Elliot (1997) suggests that the balance of time is achieved when people take actions on the right thing. What “the right thing” is can only be determined on the basis of one’s own values or life goals, whilst “taking action” implies living in accordance with these values or goals.

## **Conclusion: Towards a positive psychology of time**

This paper differs from traditional ways of thinking about time in organisations in three substantial ways. First of all, contrary to the widespread self-help book based approach to time from the perspective of time management, we have reviewed the existing empirical research on time use, focusing on the implications of this research for organizations and individuals. Secondly,

we highlighted the limitations of believing that time is infinitely stretchable and defined good time use as one that results in increased well-being, rather than productivity at the expense of well-being. Thirdly, although the work place was the focal point of the paper, we nevertheless looked at time use from the much broader perspective of life and work-leisure balance.

A range of evidence was considered, based on both objective and subjective time use studies, suggesting specific measures to increase well-being through time use, first of all, at workplace, but also touching on other life domains. The findings show that the studies of objective time use seem to be slightly less relevant, because the associations between time spent and well-being depend strongly on the person: what may be right for one, may be detrimental for another one. Some interventions, though, may be good for most people and beneficial on the large scale, such as introducing work time caps. Good time use results from choosing activities that help people to satisfy their basic needs and are directed at intrinsic goals (helping other people, establishing relationships, developing and growing as a person, maintaining health and balance in one's life). A pathway to increase basic need satisfaction and, as a result, happiness associated with good time use is to support autonomy by giving people more opportunities for choosing and working towards goals that are self-congruent and intrinsic, benefitting both themselves and the society at large.

Although caring about people's well-being may not always bring a strong short-term increase in productivity, it is definitely a more psychologically sustainable way of social existence that has long-term benefits and is a new step towards creating sustainable economics based on human development, rather than exploitation.

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