



Time Use, Unemployment, and Well-Being: An Empirical Analysis Using British Time-Use Data

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Abstract

We use nationally representative data from the UK Time-Use Survey 2014/2015 to investigate how a person's employment status is related to time use and cognitive and affective dimensions of subjective well-being. We do not find clear indications that employed and unemployed persons experience different average levels of emotional well-being when they engage in the same kinds of activities. For the employed, working belongs to one of the least enjoyable activities of their day. They also spend a large share of their time at work and on work-related activities. The unemployed, instead, spend more time on leisure and more enjoyable activities. When looking at duration-weighted average affective well-being over the entire waking time of the day, the unemployed experience, on average, more enjoyment than the employed. For the employed, the more hours they have to work on a specific day, the lower the average enjoyment they experience on that day. Differentiating the analyses by weekdays and weekends supports the finding that being able to freely allocate one's non-work time is associated with higher levels of affective well-being. In line with previous studies on cognitive well-being, we find that the unemployed report substantially lower levels of life satisfaction than the employed.

Keywords Unemployment · Happiness · Affective well-being · Time use · Day reconstruction method

JEL Classification I31 · D91 · J60 · J22

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1 Introduction

In this study, we use data from the UK Time-Use Survey 2014–2015 (Gershuny and Sullivan 2017) to examine the relationship between people's labour market status and their cognitive and affective well-being. In particular, we analyse how the average level of enjoyment experienced during the day differs between the employed and the unemployed and contrast this with differences in the average life satisfaction of the two groups. We also use the diary data to differentiate the investigation of time use and enjoyment of employed and unemployed persons by weekdays and weekends. To the best of our knowledge, the UK Time-Use Survey is the first and the only nationally representative survey collecting, from each respondent, time use and self-assessed enjoyment for all activities of two entire 24-h days, with one being a weekday and the other one being a weekend day.

Previous studies about the relationship between affective well-being and unemployment have produced mixed findings. Knabe et al. (2010) conduct a survey among unemployed and employed persons in Germany, collecting data on time use and emotions using the Day Reconstruction Method (Kahneman et al. 2004b). They find that employed persons are more satisfied with their life than the unemployed and report more positive and less negative feelings when engaged in similar activities. Weighting these activities with their duration shows, however, that average emotional well-being does not differ between the two groups. Although the unemployed feel worse when engaged in similar activities, they can compensate this by using the time the employed are at work in more enjoyable ways. While Knabe et al. (2010) use a convenience sample, Krueger and Mueller (2012) analyse data from the nationally representative American Time-Use Survey (ATUS) where, in the 2010–2013 waves, respondents report emotional experiences for three randomly chosen episodes of their diary day. The authors focus on a rather narrow subsample of full-time employed persons and unemployed persons who recently lost their jobs and restrict their attention to weekday diaries (thus excluding weekends). Comparing specific emotions without aggregating them to a unidimensional measure, they also find that the unemployed report more negative affects during leisure activities than the employed. Contrary to Knabe et al. (2010), they find that the unemployed feel significantly worse, in particular sadder and more in pain, than the employed also when calculating day-averages of emotional well-being. However, for some other emotions (happy, stressed), they report no differences between the two groups, and the employed feel more often tired than the unemployed. Other recent studies with nationally representative data also find evidence that unemployment is not necessarily negatively related to subjective well-being. Flèche and Smith (2017) report that unemployed men in France experience less unpleasantness during the day than employed men, while they do not find a difference in the experienced well-being between employed and unemployed women. Dolan et al. (2017) use ATUS data from 2012 and 2013, but examine a broad subsample of all persons who declare themselves to be employed or unemployed. Moreover, they aggregate all negative emotions into one average negative affect measure. They find that cognitive well-being ("Cantril ladder") is lower for the unemployed, while affective well-being measures (happiness, meaningfulness and negative affect) do not significantly differ between employed and unemployed persons. When looking at well-being on weekdays and weekends, Helliwell and Wang (2014) find that, while life evaluations of respondents in the Gallup/Healthways 2008–2009 survey in the US remain stable over the week, their emotional experiences are significantly better on weekends and holidays than on weekdays. This weekend effect is particularly strong for full-time employees.

In this study, we analyse data from the UK Time-Use Survey (UKTUS). The UKTUS has several distinct and advantageous features that allow us to extend the scope of previous studies. First, it is nationally representative. Second, respondents report their emotional well-being for each activity that they engaged in during the diary day, not only for three random episodes as, e.g., in the ATUS. Third, emotional well-being is measured with a broad question about the “enjoyment” respondents perceive during each activity. While this comes at the cost of less detailed information about specific emotions, it has the advantage of circumventing the need to aggregate different emotions into a unidimensional measure (which always requires the researcher to decide on the weighting scheme). Fourth, respondents fill out diaries for two days, one weekday and one weekend day. This allows comparing the time-use and enjoyment profiles of employed and unemployed persons during days when the time-structure is more or less prescribed by a person’s job (at least for the employed) and when people can more freely decide how to spend their time. Fifth, the UKTUS contains detailed information on people’s labour market status and job-search behaviour, which allows us to identify the employed and the unemployed based on objective criteria following the ILO definition as well as their own self-classification. These specific features make it worthwhile to examine the differences in emotional well-being between employed and unemployed persons with the UKTUS.

Our empirical results show that the unemployed spend more time sleeping, watching TV, playing games, and looking for jobs than the employed, who spend more time working and commuting. The comparisons of enjoyment in different activities reveal that, on the one hand, the unemployed enjoy many activities they engage in less than the employed. On the other hand, there are also activities during which the unemployed perceive more enjoyment. Over the entire day,¹ the unemployed are experiencing, on average, more enjoyment than the employed. This is due to the large amount of time employed persons have to spend at work and on work-related activities, which are both generally placed among the least enjoyable events. Meanwhile, the unemployed can use more of their time for leisure and other enjoyable activities. An analysis of emotional well-being by weekdays and weekends emphasises that there is a strong *time-composition effect* in how employed and unemployed persons experience their day-to-day life. Weekdays, on which the employed typically have to work, are less enjoyable for the employed than for the unemployed. While the unemployed tend to enjoy all days in the week equally, the employed enjoy weekends significantly more. This result holds even when we control for working time on that particular day. In line with the previous literature, we also find that unemployed persons have a lower overall life satisfaction compared to the employed.

This paper is structured in seven sections. In Sect. 2, we provide a brief literature review on the relationship between employment status and subjective well-being, with a focus on its affective dimension. Section 3 describes the data. The empirical results are presented in Sects. 4 and 5. Section 6 contains robustness checks, and Sect. 7 concludes.

¹ Throughout the analyses of well-being, we focus on the waking part of the day and exclude times during which respondents are asleep. The terms “over the entire day”, “over total waking time of the day” and “over the course of the day” will be used interchangeably.

2 Literature Review

One of the most consistent findings of the happiness literature is that unemployment is negatively related to life satisfaction. This loss in life satisfaction is much larger than what can be explained by the associated income loss (Clark and Oswald 1994; Winkelmann and Winkelmann 1998). Furthermore, although people's happiness has been found to fully adapt to many positive and negative life events, unemployment is a noticeable exception. After a job loss, life satisfaction drops substantially and remains at this lower level even when staying unemployed for long periods of time (Clark 2006; Lucas et al. 2004). Unemployment "scars", i.e. the life satisfaction of a formerly unemployed person is lower than that of a continuously employed person even after the unemployed person finds a new job (Clark et al. 2001; Knabe and Rätzel 2011). A person's unemployment has also been found to affect the life satisfaction of his or her partner (Knabe et al. 2016) and of other people living in the same region (Clark 2003; Clark et al. 2010; Shields et al. 2009).

Contrary to the more global, cognitive construct of life satisfaction, affective well-being reflects individuals' emotional situation on a moment-to-moment basis. It measures how people feel and which emotions they experience at specific points in time. Compared to responses to the life satisfaction question, momentary well-being measures suffer less from various behavioural biases (cf. Kahneman 1999). Affective well-being can be measured using the Day Reconstruction Method (DRM). It extends traditional time-use studies with emotional reports (see Robinson and Godbey 1999; Kahneman et al. 2004b). Respondents in DRM surveys are asked to first recall what they did on the day preceding the interview and reconstruct this day via a diary consisting of a time-ordered sequence of episodes. For each episode, respondents describe what they did, where and whom they were with. In addition to features of traditional time-use surveys, the DRM asks respondents about their emotional experiences or momentary enjoyment during each episode. Since the time gap between the interview and the reconstructed events is rather short, the DRM reduces potential recall biases relative to other retrospective evaluations that ask respondents about the presence or frequency of certain emotional experiences over a longer period in the past (e.g. in the last 4 weeks).

Although there is an extensive literature on the relationship between unemployment and cognitive well-being, only a few studies have looked at unemployment and affective well-being. These studies suggest that the effect of unemployment on affective well-being can be decomposed into two parts. First, there is a *saddening effect* of being unemployed. When engaged in similar activities, the unemployed feel worse than the employed. Collecting their own DRM data with phone surveys in the US, Krueger and Mueller (2008) compare the emotional well-being of employed and unemployed persons during similar activities and find that the unemployed report feeling more sadness, stress and pain than the employed. The second main finding is that there is a *time-composition effect* because the unemployed and the employed differ in how they spend their time. In their first DRM study (with employed women in Texas), Kahneman et al. (2004a,b) find that positive feelings are strongest during leisure activities and when interacting with friends and family, while negative feelings prevail mostly during episodes of work and work-related activities. This finding has been confirmed, *inter alia*, by Krueger and Mueller (2008) with US data, by White and Dolan (2009) with British DRM data, and—more recently—by Bryson and MacKerron (2017) with data collected via a smartphone app in Britain. Becoming unemployed, thus, implies that people can

substitute more enjoyable leisure activities for less enjoyable working time. This time-composition effect works against the saddening effect so that it is a priori unclear which of the two groups feels better over the course of the day.

Knabe et al. (2010) conduct a DRM survey in Germany, collecting data about daily time use and emotional states of about 1000 respondents. Their results show that unemployed persons declare lower levels of life satisfaction than the employed. They also find that employed people rank work and work-related activities among the least enjoyable activities but experience more positive feelings than the unemployed when engaged in similar (non-work) activities. While these results are in line with previous research, their main finding is that the duration-weighted average emotional state (Net Affect, U-Index, Episode Satisfaction) of an unemployed person does not differ from that of an employed person. The unemployed seem to be able to compensate the affective well-being gap experienced in similar activities by spending the time the employed have to spend on work and work-related activities in more enjoyable ways.

Krueger and Mueller (2012), who examine the first wave of the American Time-Use Survey's (ATUS) well-being module, find that the unemployed feel sadder than the employed not only when they engage in the same type of activities, but also on average over the entire day. This supports their earlier findings (Krueger and Mueller 2008). They speculate about the reasons for this saddening effect, mentioning that the abundance of free time might lead the unemployed to think more about their situation or that the marginal utility of leisure might diminish with respect to the additional leisure time the unemployed have. However, they also find that the employed feel more often tired than the unemployed. Contrary to Knabe et al. (2010), Krueger and Mueller (2008, 2012) do not aggregate the strength of the different emotions to a unidimensional measure.

Dolan et al. (2017) analyse ATUS data (the same dataset as Krueger and Mueller 2012, but later waves) and find that unemployment affects cognitive and affective well-being differently. The unemployed have significantly lower cognitive well-being ("Cantril ladder"), but there are no differences in their reported experience of episodic well-being over the day. Average scores of negative affects (aggregate of tired, stressed, sad, in pain) are even weaker among unemployed than among employed persons. Similar observations are made by Flèche and Smith (2017). They analyse French time-use data and find that negative emotions are less intensive for unemployed men compared to employed men, whereas they are similar for employed and unemployed women. Von Scheve et al. (2017) analyse panel data from the German Socio-Economic Panel in which respondents are asked to report how often they felt certain emotions in the past four weeks. They find that unemployment causes reductions in life satisfaction, but that becoming unemployed has a negative effect on emotional experiences only in the short run, but not in the long run. Wolf et al. (2019) analyse a four-year panel DRM study, which was conducted as an add-on module of the German Socio-Economic Panel. They find that the unemployed spend, on average, more time in pleasurable activities than the employed. This holds also when controlling for individual fixed effects.

3 Data Description

We use data from the UK Time-Use Survey (UKTUS) 2014/2015, a nationally representative survey of how UK residents spend their daily time (Gershuny and Sullivan 2017). At the beginning of the interview, respondents are asked questions about their socio-economic

and life circumstances. They are then asked to individually complete two time-use diaries in the following days, for which one weekday and one weekend day were randomly chosen for each household. For each of the two diary days, respondents report all activities they engaged in, how long these lasted, what exactly they did, where they were and whom they were with. A random subsample of respondents are asked to also rate their enjoyment during all their daily activities, while the others only fill out information about their time use.

The UKTUS surveys randomly selected household members aged 8 or older. In total, the sample covers 4239 household interviews with 9388 individuals who reported on 16,550 diary days. In the 2014/15 wave, the UKTUS was enhanced with cognitive well-being questions in the individual questionnaire. For example, respondents were asked to evaluate how satisfied they are with their life in general (on a scale from 0 to 10) and to what extent they feel that the things they do in their life are worthwhile (on a 1–7 scale). A subsample of respondents also received affective well-being questions in which they were enquired to rate, for each episode of their time-use diary, how much they enjoyed what they were doing on a scale from 1 (“not at all”) to 7 (“very much”). The affect question consists of only one, rather general emotion (“enjoyment”) for each diary episode. Such question design implicitly leaves the aggregation of the multitude of specific emotional experiences to the respondents themselves. Thus, researchers avoid the need to aggregate separate emotions, but lose information on specific positive and negative affects.²

We restrict the analysis to the subset of adults who responded to the enjoyment questions and who were either employed or unemployed. In the UKTUS, respondents self-declare their work status. They also answer various questions about their labour market history and future prospects, which are used to generate their employment status based on the ILO definition. A person is considered to be in employment if he/she is at least 16 years old and reports to have been in paid work in the 7 days ending last Sunday³ or is holding a job from which he/she was taking time off at the time of the interview. Unemployed persons are those who are at least 16 years old, have not been working for pay in the 7 days ending last Sunday, are not just temporarily away from a job or business, have been searching for jobs in the last 4 weeks, and would be able to start working immediately when given a job offer. We exclude persons who (also) report to be full-time students. In the main part of our analysis, we use this generated employment status to classify the employed and the unemployed. We also examine the robustness of our findings with respect to the employment status classification in Sect. 6. To remove outliers, we disregard individuals who belong to the top and bottom one percent of the income distribution. This concerns 57 employed and one unemployed person in our sample.⁴

After these adjustments, our sample comprises 3389 employed and 123 unemployed individuals having completed 6730 and 242 time-use diaries, respectively.⁵ We maintain diaries in which only some activities during waking time have missing enjoyment

² Previous studies have shown that single-item measures of episodic emotional well-being (e.g. “episode satisfaction”) are highly correlated with aggregate well-being measures derived from multi-item scales, such as the “net affect” or “U-index” (cf. Knabe et al. 2010; White and Dolan 2009).

³ The ILO definition of (un)employment requires that a person has (not) been working for more than 1 h during the reference week. UKTUS inquires only whether respondents have done “any paid work [...] either as an employee or self-employed” without referring to a specific time threshold to classify them as employed or unemployed.

⁴ Our main results are not affected by removing these outliers.

⁵ There are 50 individuals (45 employed and 5 unemployed) who submitted only one diary with enjoyment information.

information, which concerns 28,177 out of a total of 255,675 episodes. While these diaries are fully utilised in the investigation of time use, the episodes with missing enjoyment information cannot be included in the analysis of affective well-being. We directly use the enjoyment rating for each episode and calculate their duration-weighted average over the entire waking time of the day. The UKTUS provides an individual weight variable to balance the sample of this survey with the UK population. Since each individual completes two diaries, there is also a diary weight variable which not only matches the sample to the UK population, but also weights diaries by weekdays and weekend days. We apply the diary weight when analysing time use and enjoyment across all diaries of all individuals. The individual weights are used for analyses at the individual level, e.g. when examining life satisfaction or average daily enjoyment of individuals.

Table 1 shows the descriptive statistics of the diary data collected in UKTUS 2014/15. We differentiate between employed and unemployed persons. Columns 1 and 2 present statistics for the subsample of adult respondents whose diaries contain responses to enjoyment questions. Columns 3 and 4 contain data for the adult respondents who were not given or did not respond to enjoyment questions. We use the individual weights provided in the UKTUS data, which account for differences in non-response rates across subgroups and for months of the year. After weighting, months of the year in the data are uniformly distributed; and for each month, the distributions of age, gender, and region of residence in the sample match those of the UK population.

Table 1 indicates that the subsample used in our study and the subsample without enjoyment questions exhibit very similar characteristics. The differences between them are statistically insignificant for most variables. However, our subsample contains slightly more women than the subsample without enjoyment ratings. The employed in our sample live in slightly larger households, whereas the unemployed have smaller households than in the subsample without enjoyment ratings. When comparing the employed and the unemployed within each subsample, there are substantial differences between the two subgroups. Employed persons are generally older, have roughly twice as much equivalent net household income, have more often obtained a degree or attended higher education institutions and are more often married or cohabitating than the unemployed. Among the employed, the shares of married/cohabitating persons and of highly educated individuals are significantly larger than among the unemployed. In each considered subgroup, more than 50 percent of respondents are male, although statistics of gender structure in the UK in 2014 indicate that the female-male ratio is, for the most part, larger than 1 beyond the age of 27 (Office of National Statistics 2014). This could be due to the fact that women leave the labour force more often (temporarily) and become economically inactive.

4 Empirical Results

We now turn to the analysis of the differences in cognitive and affective well-being between employed and unemployed persons. We start with a comparison of cognitive well-being measures that ask respondents to evaluate their life as a whole. We then examine time-use patterns of the employed and the unemployed and compare their daily hedonic well-being. We analyse mean enjoyment scores by activities and the duration-weighted enjoyment over the total waking time on an average day as well as differentiated by weekdays and weekends.

Table 1 Descriptive statistics

	Subsample with enjoyment ratings		Subsample without enjoyment ratings	
	Employed	Unemployed	Employed	Unemployed
	(1)	(2)	(3)	(4)
Mean				
Age	42.12 (0.27)	38.28 (1.38)	41.46 (0.67)	36.53 (1.93)
Number of children in household	0.61 (0.02)	0.59 (0.11)	0.63 (0.05)	0.58 (0.16)
Number of household members	3.03 (0.04)	2.70 (0.14)	2.88 (0.06)	3.12 (0.20)
Monthly household income (in GBP, OECD equivalence scale)	2093 (82.34)	991 (153.95)	1904 (107.12)	792 (93.94)
Weekly working hours in main job	35.78 (0.23)	35.59 (0.56)		
Unemployment duration (days)		1429 (206.83)		1323 (294.58)
Number of diary episodes	36.73 (0.22)	34.99 (1.30)	33.42 (0.46)	33.11 (1.83)
Episode duration (min)	39.20 (0.24)	41.15 (1.52)	43.09 (0.59)	43.50 (2.41)
Shares (in %)				
Gender				
Male	52.52	55.48	56.22	56.58
Female	47.48	44.52	43.78	43.42
Marital status				
Single (never married)	22.12	41.07	22.44	43.96
Married/cohabitating	68.82	42.25	68.69	46.60
Divorced/widowed	9.05	16.68	8.88	9.44
Highest qualification				
Degree/higher education	51.53	36.87	47.47	30.46
A-level/equivalent	19.32	22.56	21.38	33.03
Secondary	23.01	28.78	24.23	24.87
Number of individuals	3389	123	647	60
Number of diaries	6730	242	1294	119
Number of episodes	247,207	8468	43,688	3965

Standard errors in parentheses. All observations are weighted using the individual weights provided by UKTUS

4.1 Cognitive Well-being Measures

In Table 2, we show how the employment status is related to people's evaluation of life as a whole. The first question asks respondents about their satisfaction with their life (0–10

Table 2 Cognitive well-being measures

	Employed	Unemployed	Difference
Life satisfaction	7.63 (0.04)	6.23 (0.22)	1.40***
Overall, to what extent do you feel that the things you do in your life are worthwhile?	7.77 (0.06)	6.80 (0.32)	0.97***

Standard errors of means in parentheses

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

scale).⁶ The second question asks how much respondents feel that the things they do in their life are worthwhile. This measure is originally elicited on a 1–7-scale, which we convert to a 0–10 scale by linearly normalizing scores to ease comparison and interpretation.

Table 2 shows that the cognitive well-being of the employed is significantly higher than that of the jobless. The unemployed report a life satisfaction that is, on average, 1.4 point lower than that of the employed. The difference is statistically significant at the 1%-level. This is in line with the established finding that unemployment is detrimental to life satisfaction. The subjective assessment of whether one is doing worthwhile things in life also exhibits a statistically significant difference of 0.97 points between working and jobless persons. This also corresponds to previous findings that people in employment perceive a purpose in life and that working is considered to be a meaningful, albeit not very enjoyable, activity (White and Dolan 2009).

4.2 Analysis of Time-Use Data

Table 3 illustrates how employed and unemployed persons allot their daily time to different activities.

Employed persons spend, on average over the week (including weekends), 4 h and 21 min per day working and 44 min commuting. The unemployed, instead, do not engage in working and spend this time on other activities. According to Table 3, unemployed persons devote a significantly larger amount of time to leisure, e.g. sleeping, playing games, watching TV, computing and other mass-media. In each of these activities, they spend between 20 min and over 1 h longer than employed persons. The differences are statistically significant at the 1%-level.

Job-seeking takes up, on average, 32 min of an unemployed person's day, but only 1 min for the employed. The considerable difference implies that the employed spend only little time with on-the-job-search and/or that only a small fraction of the employed spends time searching for jobs. Unemployed persons also devote significantly more time per day to study and training activities (+10 min) and to performing household tasks, such as cooking (+10 min) or household management (+21 min). However, they do not seem to differ from the employed with regards to the amount of time spent on eating, personal care, reading, social life, or sports. The differences in time spent on these activities are at most 6 min and statistically insignificant.

⁶ In the beginning of the survey period (April–September 2014), life satisfaction was elicited on a scale from 1 to 7 (before switching to a 0–10 scale). We rescale the answers linearly to a 0–10 scale.

Table 3 Time use by employment status and activities

Activity	Employed		Unemployed		Differences E – UE
	Time-use	SE	Time-use	SE	
Working/employment-related activities	261	4	0		261***
Breaks at work	9	0	0		9***
Commuting to work	44	1	0		44***
Sleeping	496	2	542	10	-46***
Eating	79	1	81	6	2
Job seeking	1	0	32	9	-31***
Study/training	3	0	13	6	-10*
Cooking/baking	31	1	41	3	-10***
Household management/shopping and services	85	2	106	11	-21*
Gardening and pet care	15	1	17	4	-2
Childcare	25	1	32	6	-7
Helping household members	6	0	10	5	-4
Volunteer/participatory activities	6	1	15	6	-9*
Social life	44	1	43	6	-1
Entertainment/sports/outdoor activities	42	1	48	8	-6
Free time learning/art & hobbies	5	0	13	4	-8**
Computing and other mass-media	17	1	39	7	-22***
Playing games	10	1	33	10	-23**
Reading	13	1	15	4	-2
TV/video	117	2	194	16	-77***
Radio/music	3	0	14	6	-11*
Personal care	56	1	56	4	0
Travel (other purposes)	53	1	66	6	-13**
Other time use	19	1	31	7	-12*

In min; average time spent in each activity is not conditional on participating in that activity

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

4.3 Affective Well-being by Employment Status

Table 4 reveals how much enjoyment is experienced by the employed and the unemployed, on average, when engaged in similar activities. Both groups tend to assign relatively high enjoyment scores to socialising and active leisure activities (sports, entertainment/outdoor activities), while they do not seem to enjoy duties such as household management, working (for the employed), or job seeking. Employed persons feel best when playing games, whereas the unemployed report the highest average enjoyment scores when volunteering or engaging in participatory activities (e.g. meetings or religious activities).

People report the lowest enjoyment when engaging in job search activities, regardless of their employment status. The observation that unemployed persons feel particularly bad when looking for a job confirms the findings by Knabe et al. (2010) for Germany and Krueger and Mueller (2012) for the US. Work-related activities (working and commuting) also belong to the least enjoyable activities of the day for employed persons. This supports

Table 4 Enjoyment score across individuals by employment status & activities

	Employed		Unemployed		Differences E – UE
	Enjoyment	SE	Enjoyment	SE	
Playing games	6.24	0.06	5.96	0.22	0.28
Social life	6.17	0.03	6.00	0.17	0.17
Entertainment/sports/outdoor activities	6.17	0.03	6.10	0.17	0.07
Reading	6.02	0.04	5.53	0.30	0.49
Eating	5.96	0.02	5.91	0.14	0.05
Radio/music	5.87	0.10	6.12	0.41	-0.25
TV/video	5.84	0.02	5.76	0.13	0.08
Free time learning/art & hobbies	5.83	0.11	5.97	0.18	-0.14
Volunteer/participatory activities	5.82	0.10	6.52	0.23	-0.70***
Childcare	5.76	0.05	5.87	0.24	-0.11
Gardening and pet care	5.73	0.05	5.64	0.24	0.09
Other time use	5.52	0.08	5.38	0.27	0.14
Computing & other mass-media	5.51	0.05	5.02	0.26	0.49*
Helping household members	5.50	0.09	4.94	0.22	0.56**
Breaks at work	5.41	0.06			
Cooking/baking	5.31	0.03	5.00	0.17	0.31
Personal care	5.28	0.03	5.55	0.16	-0.27
Travel (other purposes)	5.12	0.03	5.32	0.12	-0.20
Study/training	4.84	0.34	5.78	0.18	-0.94**
Household management/shopping & services	4.72	0.03	4.59	0.15	0.13
Working/employment related activities	4.64	0.04			
Commuting to work	4.54	0.05			
Job seeking	3.40	0.44	3.49	0.56	-0.09
Day-average enjoyment	5.29	0.02	5.47	0.09	-0.18**

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

previous evidence that working is one of the worst daily activities for employed persons, as shown, *inter alia*, by Bryson et al. (2017) with British data and by Kahneman et al. (2004a, b) for working women in Texas.

When comparing enjoyment ratings across all activities, we find that the employed enjoy some types of activities more than the unemployed, whereas there are also types of activities for which it is the other way around. For example, leisure activities and taking care of household chores are enjoyed more by the employed than by the unemployed, while the unemployed feel better than the employed during childcare, studying/training, and volunteering. For most activities, however, the enjoyment gaps between the two groups are statistically insignificant. Hence, the UKTUS does not provide clear evidence for what has been called the *saddening effect* of being unemployed (Knabe et al. 2010).

It is noticeable that, while the unemployed do not, on average, enjoy searching for jobs, helping other household members, or doing household chores, they enjoy studying and training, volunteering, and engaging in participatory activities. These latter activities are rated significantly better by the unemployed than by the employed. This might suggest that the feelings of meaningfulness the employed gain from working is partially compensated

Table 5 Day-average enjoyment on weekdays and weekends

	Weekday	Weekend day	Difference (WD – WE)
Employed	5.19 (0.02)	5.54 (0.02)	–0.35***
Unemployed	5.45 (0.10)	5.54 (0.09)	–0.09
Difference (E – UE)	–0.26***	0.00	

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Standard errors of means in parentheses

by engaging in helping the community and/or improving knowledge and skills when one is unemployed. Our result is supportive of findings by Gimenez-Nadal and Molina (2015) who show that voluntary activities enhance the daily affective well-being reported by American respondents in the ATUS 2010.

At the bottom of Table 4, we present the duration-weighted average enjoyment score over the total waking time. We find that, averaged over their entire day, the jobless experience even more enjoyment than the employed. The difference is statistically significant at the 5%-level. Although the unemployed are less satisfied with their life and, in general, do not enjoy themselves more than the employed do in the same specific daily activities, they perceive higher average affective well-being when taking account of how they actually spend their time over the entire day. The unemployed spend far more time on leisure and entertainment than the employed, because the latter group has to go to work. The unemployed also spend more time of their day on free time learning and art-related activities, volunteering and participatory activities. All of these activities appear to be quite enjoyable. Employed persons place working among the least enjoyable activities of the day.⁷ Our findings suggest that, while there is no strong evidence for a *saddening effect* in the UKTUS 14/15 data, there is a strong *time-composition effect*. This results in a higher average diurnal hedonic well-being experience of unemployed persons compared to the employed. This is supportive of the findings by Knabe et al. (2010) and Flèche and Smith (2017).

In Table 5, we further differentiate the diurnal affective well-being by weekdays and weekends. The employed enjoy weekend days substantially more than weekdays. For the unemployed, the enjoyment gap between weekdays and weekends is rather small and statistically insignificant. The average enjoyment levels of employed and unemployed persons are very similar during weekends. On weekdays, however, the unemployed experience significantly higher affective well-being levels than the employed. This is, again, supportive of what we have found regarding the time-composition effect.

We also look further into how employed and unemployed persons spend their time and experience specific activities during weekdays and weekends (Tables A2 and A3 in the

⁷ When we compare the employed and the unemployed to those who are out of the labour force, results show that economically inactive persons report a level of day-average enjoyment that is significantly higher than that of the employed and the unemployed. They spend more time on household production, and also enjoy these activities more than the other two groups. They spend less time on leisure, however, they also do not have to allocate time to unenjoyable activities such as job search or working. Economically inactive individuals report lower (higher) levels of life satisfaction than the employed (unemployed).

Supplementary Material). In general, we find that time use by the employed differs substantially between weekdays and weekends. Most of the time spent working on weekdays is used for leisure activities on weekends, e.g. sleeping and watching TV. The time use of unemployed persons remains comparatively stable between weekdays and weekends. The only statistically significant differences we observe are that the unemployed sleep more and socialise more on weekends, whereas they spend more time on job search and study or training programs during weekdays. When looking at affect ratings, we see that the employed enjoy most of the activities, except playing games and working, significantly more on weekends than on weekdays. In contrast, unemployed persons do not seem to enjoy their activities differently on weekdays and weekends (except playing games, which they rate significantly more enjoyable on weekends).

5 Regression Analysis

In the preceding section, we compared (unconditional) mean enjoyment scores between the employed and the unemployed. Since the two groups differ not only in their employment status, but also in other socio-demographic characteristics (see Table 1), it is possible that the observed differences are caused by factors other than the employment status. To verify our results, we regress different measures of well-being as dependent variables on employment status while controlling for other observable characteristics of respondents. To have the same number of observations in every specification, we restrict the sample to respondents who have non-missing observations for all the variables we consider.

We estimate a regression model with three different specifications. The baseline specification includes only a dummy variable indicating the person's employment status. The second specification is extended with various personal and socio-demographic characteristics, such as gender, marital status, education, age, household size, and number of children. The final specification adds the log of monthly household income (equivalised using the modified OECD scale) to separate monetary from non-monetary effects of unemployment.

5.1 Life Satisfaction and Individual Diurnal Enjoyment

The first three columns of Table 6 contain the results of three regression specifications for life satisfaction. They are in line with the literature and confirm our earlier descriptive findings that unemployed people are less satisfied with their life than the employed. The relationship between unemployment and life satisfaction is negative and statistically significant at the 1%-level. The magnitude of the estimated coefficient becomes smaller (in absolute terms) as control variables are added. This suggests that the factors we control for in the latter two specifications capture part of the negative relation between life satisfaction and employment status.

The third specification indicates that higher income is, *ceteris paribus*, associated with higher life satisfaction, as shown by the positive and highly significant coefficient of income. Being unemployed is usually associated with a loss of income, so this explains part of the negative relation between unemployment and life satisfaction. In line with the life satisfaction literature, unemployment is still associated with a lower level of life satisfaction even after controlling for various socio-demographic characteristics and household income, which suggests that unemployment also has non-monetary, psychological cost.

Table 6 Regression results: life satisfaction and daily enjoyment at individual level

	Life satisfaction			Individual day-average enjoyment		
	(1)	(2)	(3)	(4)	(5)	(6)
Unemployment	-1.340*** (0.239)	-1.193*** (0.230)	-0.936*** (0.249)	0.189* (0.098)	0.159* (0.095)	0.018 (0.101)
Female		0.132* (0.072)	0.150** (0.071)		0.129*** (0.028)	0.122*** (0.028)
Age		-0.097*** (0.020)	-0.097*** (0.020)		-0.027*** (0.008)	-0.027*** (0.008)
Age ² × 10 ⁻³		1.064*** (0.236)	1.066*** (0.234)		0.340*** (0.091)	0.333*** (0.090)
Married/cohabitating		0.741*** (0.110)	0.672*** (0.108)		-0.029 (0.043)	0.006 (0.044)
Degree/higher education		-0.082 (0.085)	-0.189** (0.089)		-0.146*** (0.036)	-0.090** (0.037)
Number of adults in household		-0.016 (0.055)	-0.015 (0.052)		-0.003 (0.021)	-0.004 (0.021)
Number of children in household		0.054 (0.042)	0.112** (0.045)		0.019 (0.022)	-0.013 (0.023)
Log (Equivalised) HH income			0.305*** (0.071)			-0.172*** (0.035)
Constant	7.618*** (0.043)	9.134*** (0.425)	6.924*** (0.646)	5.289*** (0.021)	5.801*** (0.181)	7.041*** (0.323)
Observations	2644	2644	2644	3206	3206	3206
R ²	0.02	0.06	0.07	0.00	0.02	0.03

OLS Regressions. Standard errors in parentheses. Individual weights applied

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Columns 4–6 of Table 6 show the results of regressing daily affective well-being on employment status and various socio-demographic characteristics at the individual level. To construct the day-average enjoyment at individual level, we weight the weekday and weekend diaries of the same person at the ratio 5:2.⁸ In all specifications, unemployment is positively related to the average affective well-being experienced over the day. In Column 4, the relationship is statistically significant at the 10%-level. In the two specifications with further control variables, the coefficients of the unemployment dummy are smaller than in the first specification (and statistically insignificant in the third specification). The point estimates remain positive, though. Our earlier findings, obtained by comparing

⁸ There are a small number of respondents who only report on one day or on two days which are both weekdays or weekend days (60 out of 3709 individuals of our sample). For respondents from the former group, we simply treat their average enjoyment during the report-day as their individual daily emotional well-being. With respect to the latter, since both diaries have the same relative position of days of the week, each diary day is given a weight of one-half when calculating the average daily enjoyment of that individual. The results remain qualitatively unchanged if we restricted the sample to individuals who report one weekday and one weekend diary.

unconditional means, are thus supported by the multivariate regression analysis. Even though unemployment is related to lower life satisfaction, there is no evidence for a negative relationship between unemployment and diurnal affective well-being. If anything, the average affective well-being perceived during the day is positively associated with unemployment.

Contrary to its relation with life satisfaction, we find that net household (log) income is significantly negatively associated with the level of daily affective well-being of individuals. This corresponds to other findings in the literature which show that the positive relationship between income and cognitive well-being cannot be found for daily experienced happiness (Kahneman et al. 2006; Knabe et al. 2010; Kushlev et al. 2015; Stone et al. 2018), although these studies do not find a significantly negative relationship. The coefficients of the equivalised household income variable remain negative, but become very small and insignificant for individual daily enjoyment if we run regressions on linear income instead of log income. When we analyse only individuals with equivalised net household income between the 5th and 95th percentile of the sample, the linear income coefficient is again negative, becomes larger and statistically significant. In all these regressions, the coefficients of the other variables remain practically unchanged. When we control for income, the unemployment dummy becomes far smaller than in other specifications and statistically insignificant. Thus, a large part of the positive correlation between unemployment and individual daily enjoyment seems to be mediated through income. One reason could be that the employed earn higher income from working, which is ranked one of the least enjoyable activities of their day. Thus, income is positively related to working hours and thus negatively related to individual enjoyment. We will examine this possibility by controlling for working hours in further regressions. Another reason could be that the higher income level raises aspirations on how one would like to spend one's day, so that high-income persons rate similar regular day-to-day circumstances worse than people with lower incomes.

The number of individual observations in the life satisfaction regressions is smaller than that in the individual daily enjoyment regressions (2644 vs. 3206 persons, resp.). The difference is caused by UKTUS' household and individual interviewing procedures. The individual questionnaire, which also contains the life satisfaction question, can be answered by one household member also on behalf of other household members if these are absent on the date of the interview (so-called "proxy interviews"). In that case, all the questions relating to the other member's subjective assessments of well-being must then be skipped. However, the absent persons were still given the diaries to complete later on their own. Thus, there are more persons for whom diaries are collected than persons with life satisfaction information.

5.2 Daily Affective Well-Being and Working Hours

Above, we have found that income is negatively related to day-average enjoyment of individuals. A potential explanation for this finding could be that individuals who earn more are, in fact, those working more. Spending more time on working, one of the least enjoyable activities of the day, could then lead to lower duration-weighted daily enjoyment, which would result in a negative correlation between income and daily enjoyment. The validity of

Table 7 Regression results: day-average affective well-being (Diary Level)

	Daily enjoyment				
	(1)	(2)	(3)	(4)	(5)
Unemployment	0.194** (0.097)	0.263** (0.111)	-0.058 (0.114)	-0.083 (0.114)	-0.208* (0.114)
Weekend		0.339*** (0.019)	0.121*** (0.025)	0.127*** (0.025)	0.131*** (0.025)
Unemployment × weekend		-0.240** (0.094)	-0.022 (0.096)	-0.027 (0.096)	-0.034 (0.095)
Working episode dummy			-0.059 (0.058)	-0.061 (0.056)	-0.066 (0.055)
Working time			-0.051*** (0.008)	-0.050*** (0.008)	-0.048*** (0.008)
Female				0.075*** (0.028)	0.069** (0.028)
Age				-0.023*** (0.008)	-0.023*** (0.008)
Age ² × 10 ⁻³				0.284*** (0.090)	0.278*** (0.088)
Married/cohabitating				-0.040 (0.043)	-0.008 (0.044)
Degree/higher education				-0.143*** (0.036)	-0.090** (0.036)
Number of adults in HH				0.005 (0.023)	0.004 (0.023)
Number of children in HH				0.008 (0.022)	-0.022 (0.023)
Log (Equivalised) HH income					-0.161*** (0.035)
Constant	5.290*** (0.021)	5.192*** (0.024)	5.514*** (0.033)	5.980*** (0.182)	7.135*** (0.324)
Observations (Diaries)	6389	6389	6389	6389	6389
R ²	0.00	0.03	0.07	0.08	0.09

OLS Regressions. Standard errors in parentheses. Diary weights applied

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

this argument can be tested by taking the presence and extent of work activities during the diary day into account.

Table 7 reports the regression results at the diary level. We pool all diaries regardless of which day of the week the diary represents and add control variables for the presence of work activities. In particular, we add a dummy variable that indicates the presence of working episodes, i.e. taking value 1 if the person works on that day and 0 otherwise, as well as a continuous variable capturing the total number of working hours if the person actually works. We also include a dummy variable of whether or not the diary day is a

weekend day, as well as an interaction term of unemployment and the weekend dummy variable.

Similarly to the daily enjoyment regression at the individual level (Table 6), our estimates at the diary-day level yield an unemployment coefficient that is not only positive but also statistically significant at the 5%-level when we do not control for other variables.

In the second specification, we see that the employed enjoy weekends significantly more than weekdays. The significant interaction effect indicates that there is a substantial enjoyment gap between the employed and the unemployed on weekdays, while we do not find significant differences on weekends. When we add the working day dummy and working hours as regressors, however, the interaction term becomes statistically insignificant (Column 3). Having to work on a particular day and the total number of working hours during that day are both negatively related to the average level of enjoyment experienced over the entire day. Each additional working hour is associated with a statistically significant reduction of average enjoyment on that day. The negative working time coefficient supports our earlier findings that there is a strong *time-composition effect*, i.e. the jobless are doing more enjoyable activities when the employed are working. The perceived enjoyment level of unemployed persons is lower than that of employed persons on a day off, as shown by the negative unemployment coefficient in specifications (3) to (4). However, these coefficients are very small in magnitude and statistically insignificant, so we do not find evidence for a saddening effect in the regression analyses either.

In the last specification, in which the distinction between weekdays and weekends, the presence and extent of work activities on the diary day, and the equivalent household income are taken into account, being unemployed is significantly negatively related to day-average well-being. As before, we find a negative and significant relationship between the equivalent log income of the household and the reported duration-weighted affective well-being. Unemployed persons typically earn lower income, so including the negative income control results in an even lower (more negative) unemployment coefficient. Compared to Table 6, the income coefficient appears to be slightly smaller (in absolute terms) but remains negative and significant even when we control for working. This implies that working more hours is only partly the reason why persons with higher income enjoy their day less, *ceteris paribus*.

5.3 Daily Affective Well-Being by Weekday/Weekend

Table 8 presents regressions results for daily enjoyment at the diary level, differentiated by weekdays and weekends. We restrict our sample to individuals who provided both a weekday and a weekend diary.

The first column indicates that unemployment is significantly positively associated with the day-average assessment of subjective enjoyment on weekdays. When the presence and extent of work activities (Column 2) and other socio-demographic characteristics (Column 3) are controlled for, this coefficient becomes negative, smaller and statistically insignificant. In Column 4, when income is also accounted for, our regression shows that unemployment is negatively related to people's daily emotional well-being. We observe a similar pattern in the regression on the subsample of weekend diaries (Columns 5–8). The unemployment coefficient is positive but statistically insignificant in the first specification and negative in the latter three. Before controlling for any other factors, the unemployment coefficient in the weekend regression is smaller than in the weekday regression and insignificant, most likely because fewer employed persons have to work on weekends than

Table 8 Regression results: daily affective well-being by weekday/weekend (Diary Level)

	Daily enjoyment							
	Weekday				Weekend			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Unemployment	0.258** (0.114)	-0.060 (0.119)	-0.075 (0.116)	-0.199* (0.120)	0.021 (0.089)	-0.087 (0.090)	-0.120 (0.087)	-0.260*** (0.094)
Working day (Dummy)		-0.059 (0.072)	-0.062 (0.069)	-0.067 (0.068)		-0.086 (0.078)	-0.076 (0.076)	-0.076 (0.076)
Working time		-0.051*** (0.009)	-0.047*** (0.009)	-0.044*** (0.009)		-0.050*** (0.014)	-0.054*** (0.013)	-0.056*** (0.013)
Female		0.095***	0.095***	0.091***			0.032	0.024
Age			(0.032)	(0.032)			(0.031)	(0.031)
Age ² × 10 ⁻³			-0.026***	-0.025***			-0.020***	-0.019***
Married/cohabitating			(0.009)	(0.009)			(0.009)	(0.009)
Degree/higher education			0.323***	0.318***			0.218**	0.213**
Number of adults in household			(0.101)	(0.100)			(0.103)	(0.100)
Number of children in household			-0.059	-0.027			-0.002	0.031
Log (Equivalentized) net HH income			(0.049)	(0.049)			(0.045)	(0.045)
			-0.149***	-0.095**			-0.133***	-0.079**
			(0.041)	(0.043)			(0.033)	(0.032)
			0.008	0.007			0.007	0.006
			(0.024)	(0.023)			(0.027)	(0.027)
			0.014	-0.016			0.001	-0.029
			(0.026)	(0.027)			(0.020)	(0.022)
			-0.164***	-0.164***			-0.166***	-0.166***
			(0.040)	(0.040)			(0.033)	(0.033)

Table 8 (continued)

		Daily enjoyment							
		Weekday				Weekend			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant		5.193*** (0.024)	5.511*** (0.040)	5.993*** (0.206)	7.161*** (0.366)	5.533*** (0.020)	5.642*** (0.021)	6.092*** (0.199)	7.292*** (0.314)
No. of Obs.		3169	3169	3169	3169	3169	3169	3169	3169
R ²		0.00	0.05	0.06	0.07	0.00	0.05	0.05	0.07

OLS Regressions. Standard errors in parentheses. Diary weights applied

Significance level: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

on weekdays. In the last specification of the weekend regression (Column 8), being unemployed is significantly negatively associated with enjoyment. Working time has a negative and highly significant relationship with enjoyment in all the specifications on both types of days. A comparison between weekday and weekend regressions suggests that having to work on weekends is perceived worse than working on weekdays, although the difference is not statistically significant.

The multivariate regressions support the results of the comparison of means (Table 5). As we have seen in the descriptive analysis, employed persons consider working and employment-related activities among the least enjoyable activities, and being unemployed allows substituting more agreeable activities for less pleasant working hours. During weekdays, the unemployed obtain higher day-average enjoyment than the employed, whereas the daily affective well-being is not significantly different for the two groups on weekends. These findings point to the importance of the time-composition effect. On weekdays, employed persons devote time on labour market activities while unemployed persons use more of their available time for leisure. On weekends, when also the employed are able to allocate more time to leisure, the employment status is no longer related to people's ability to spend their time in enjoyable ways.

6 Robustness Checks

Our findings are robust to different sample restrictions and different definitions of employment statuses (see Table A4 in the Supplementary Material).

Our results continue to hold when we exclude part-time employees. Compared only to fulltime employees, the unemployed exhibit higher daily affective well-being. The difference is even larger and statistically significant at the 1%-level than when comparing the unemployed to all employees. That we obtain even stronger results when we exclude part-time employees from our analysis supports the view that the time-composition effect matters for emotional well-being in everyday life.

In another robustness test, we use different definitions of unemployment. When we use people's self-reported employment status to identify the unemployed, i.e. we consider all persons who say that they are unemployed instead of using the ILO definition of unemployment, the life satisfaction reported by the unemployed turns out to be lower than in our subsample of unemployed persons in the main analysis. In this case, the unemployed still show higher perceived day-average enjoyment, but the gap between them and the employed is smaller and statistically insignificant. When we restrict our analysis to persons who declare themselves to be unemployed and who are unemployed according to the ILO definition, we see that their life satisfaction is even lower, but their affective well-being is higher than for the other classifications of unemployment. Comparing the employed and the unemployed for whom the ILO classification and their self-declared employment status coincide, we observe the largest well-being gaps between the two groups – in favour of the employed when looking at life satisfaction, but in favour of the unemployed when considering affective well-being.

All in all, our findings appear robust to alternative sample restrictions.

7 Conclusion

In this study, we investigate the relationship between employment status, time use, and multiple dimensions of subjective well-being, using the most recent wave of the UK Time-Use Survey (UKTUS 2014–2015). Our main results indicate that employment status plays an important role for individuals' well-being. While this is a common finding in the research on subjective well-being, we find that it is critical to differentiate between different kinds of subjective well-being. Our findings indicate that, even though unemployment is significantly negatively related to cognitive well-being (life satisfaction), it is positively related to diurnal affective well-being (average momentary enjoyment). Jobless persons appear to experience slightly less enjoyment compared to the employed during leisure activities or duties related to home production such as cooking or household management. However, they experience more enjoyment in other types of activities that are related to participating in the local community, volunteering, self-care, and self-improvement. Overall, we do not find evidence that the unemployed enjoy their time less than the employed when the employed do not have to spend time at work or with work-related activities. The employed, however, report that working belongs to one of the least enjoyable experiences of the day. When considering total waking time, the employed spend, on average, more than 4 h per day at work, while the unemployed allot this time to more enjoyable activities, e.g. playing games or watching TV. Our analysis suggests that this time-composition effect is sufficiently strong such that the unemployed have a higher average duration-weighted diurnal affective well-being than the employed.

More differentiated analyses have shown that these differences depend on whether one is looking at weekdays or weekends. The unemployed enjoy their weekdays as much as their weekends. The employed, however, enjoy weekdays less than weekends, mainly (but not entirely) because they have to spend time at work. While weekends are equally enjoyable for the employed and the unemployed, the employed enjoy weekdays less than the unemployed, but only if they actually have to work. We also see that having to work more hours on a particular day is associated with lower emotional well-being on that day. Our findings on weekday/weekend differences provide further evidence for the relevance of time composition for the differences in the day-average affective well-being of employed and unemployed persons.

The results we obtain from nationally representative British data are supportive of the findings by Knabe et al. (2010) and Wolf et al. (2019) for Germany, Dolan et al. (2017) for the United States, and Flèche and Smith (2017) for France, but differ from those of Krueger and Mueller (2012). These differences could arise from the narrower focus of the latter study, which restricts the analysis to weekdays, compares only full-time employees and unemployed persons who recently lost their job, and abstains from combining separate emotions into an aggregate emotional well-being score. In our study, we analyse all individuals who are classified as being employed and unemployed following the ILO definition, analyse both weekdays and weekends and, most importantly, examine a single emotional well-being measure. This suggests that, when taking a broader focus and treating emotional well-being uni-dimensionally, there are strong indications from different countries that unemployment affects the cognitive and affective dimensions of subjective well-being in very different ways. Our findings are in line with the vast literature showing that unemployment makes people dissatisfied with their life. However, when looking at enjoyment of everyday life, we do not find a

negative relation. If anything, the unemployed are able to enjoy their days more than the employed. They do not have to experience the discontent at work but can spend their time in more enjoyable ways.

A potential explanation for these opposing effects is that unemployment strongly affects people's perceptions of their life achievements, but does not change their experiences of everyday routines. Living up to one's own aspirations and to the expectations of others, i.e. conforming to social norms, is decisive for evaluating one's life positively. Some studies have provided suggestive evidence that it is the deviation from the social norm that drives the negative effect of unemployment on life satisfaction. For example, Clark (2003), Shields et al. (2009) and Clark et al. (2010) have shown that unemployment hurts less if unemployed persons are surrounded by more unemployment in their region of residence, which would be associated with a weaker social work norm. Hetschko et al. (2014) show that the life satisfaction of older long-term unemployed persons increases strongly when they are allowed to retire. Although there are practically no changes in these persons' objective life circumstances, leaving unemployment for retirement allows them to identify with a different social group and, although not working in either case, switch from norm deviance to norm conformity. This suggests that adherence to social norms matters when being asked to evaluate one's life in general. The findings on affective well-being, in contrast, suggest that such general reflections on one's life do not take place in everyday life or at least that they do not affect people's ability to enjoy specific moments and activities. When people are able to spend their time on active leisure activities, such as hobbies, sports, and meeting friends, they can have a good day even when unemployed.

Future research could examine more thoroughly the aspects that are most relevant to individuals' experienced utility, and study the channels through which they affect well-being. For example, one could investigate to what extent the loss of social contacts at work, the possibility of diminishing marginal enjoyment of leisure, or norm deviance drive the saddening effect. This opens rooms for further research on labour market experiences and subjective well-being.

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Compliance with Ethical Standards

Conflicts of interest The authors declare that they have no conflict of interest.

Availability of data and material This research uses data from the United Kingdom Time-Use Survey (UKTUS). The data is available to users registered with the UK Data Service (<https://doi.org/10.5255/UKDA-SN-8128-1>). Registration and access to the data is free of charge for research purposes.

Code availability The authors confirm that they will provide all program and output files as supplementary material.

Informed consent Not applicable, because the analysis presented in this paper does not involve human participants.

Research involving human participants or animals The study uses secondary data that has been made available to the public by the UK Data Service and is not individually identifiable. Therefore, the analysis presented in this paper does not involve human participants (e.g. Federal Policy for the Protection of Human Subjects (45 CFR 46)).

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