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## The Subjective Well-Being of Workfare Participants: Insights from a Day Reconstruction Survey

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# The Subjective Well-Being of Workfare Participants: Insights from a Day Reconstruction Survey

## Abstract

In this paper, we shed more light on the subjective well-being of workfare participants and compare it to the well-being of unemployed and employed workers. We use data from a self-conducted survey among participants in workfare schemes in Germany. We examine two subdimensions of subjective well-being – life satisfaction and emotional well-being – separately to obtain a more comprehensive view of the subjective impact of workfare jobs. Our results show that the life satisfaction of workfare participants is between that of employed and unemployed people. More surprisingly, perhaps, we find that their emotional well-being is the highest of these three groups.

JEL-Code: I310, J600, D600.

Keywords: workfare, unemployment, cognitive well-being, emotional well-being, life satisfaction, Day Reconstruction Method.

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## 1. Introduction

Workfare is considered to be a useful complementary policy tool to improve the efficiency of the welfare state. The OECD (2005), for example, explicitly recommends work requirements for those receiving unemployment or welfare benefits as part of a comprehensive activation strategy on the labor market. Empirical analyses have focused on the effectiveness of workfare to bring the unemployed back into employment, either after program participation (e.g. Huber et al. 2011) or even before actual participation if workfare requirements are used as a threat to induce the unemployed to look more actively for regular jobs (Black et al. 2003, Geerdsen 2006). Little is known, however, on what participation in workfare programs means for the participants while they are participating. In this paper, we will shed some light on the subjective well-being of workfare participants and compare it to the well-being of unemployed and employed workers.

The common view of workfare is that it enables a more favorable trade-off between equity and efficiency in unemployment insurance schemes. Unemployment insurance has to provide a sufficiently high level of income support to effectively insure unemployed workers against the income risk associated with unemployment and to ensure an income that at least covers the socio-cultural subsistence needs that modern welfare states guarantee to all people. Granting high levels of unemployment benefits increases the utility when unemployed but reduces the incentive of the unemployed to take up employment as quickly as possible again. Workfare, i.e. tying benefit receipt to the requirement to spend some time working in public employment schemes, can help mitigate this welfare state dilemma. Withdrawing leisure from the unemployed at a given benefit level reduces their utility, which increases their job search incentives and their willingness to accept job offers even if they are not well-paid without sacrificing the welfare state's desire to provide income support.

Several studies have conducted a theoretical analysis of the conditions under which the implementation of work requirements is socially desirable. Besley and Coate (1992) consider workfare in a model without unemployment and show that work obligations to qualify for income support can help the welfare state to better target basic income support to the low productivity worker whose labor market income falls short of a socially defined subsistence minimum. In such a setting, workfare makes it unattractive for high productivity workers to mimic the low-productivity types as they can earn more in the private sector than in a workfare measure. It improves the efficiency of public income support if the share of low productivity workers is low and productivity differences large. In the presence of

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unemployment, Kreiner and Tranæs (2005) argue that workfare can help increase the effectiveness of unemployment insurance by better targeting benefits to the truly needy. They show that workfare can separate voluntarily unemployed individuals, who choose not to work because of a relatively high disutility of labor, from involuntarily unemployed individuals, who have a relatively low disutility of labor but just happen to find no job. In the search-and-matching model by Andersen and Svarer (2014), workfare can reduce equilibrium unemployment by improving the incentive structure on the labor market. For the unemployed who have not taken part in workfare yet, workfare exerts a *motivation or threat effect* as it increases the incentives to engage in search activities and to accept a job offer even if the job is not well paid. For the employed, workfare reduces the value of their outside option, thus leading to more wage moderation. Through both channels, equilibrium unemployment falls.

The gains from workfare in all these models come at a cost, though. Unemployed people without work obligation enjoy more leisure than workfare participants. For any given unemployment benefit level, the utility derived from being unemployed without workfare thus exceeds the utility derived from being unemployed but facing some workfare obligation. This calls for cost-benefit analyses to determine whether workfare is socially desirable. In the model of Kreiner and Tranæs (2005), this is the case if the share of voluntarily unemployed individuals is sufficiently large because the utility loss of involuntarily unemployed workers when giving up leisure is then relatively small compared to the gains from not having to pay for the voluntarily unemployed. Andersen and Svarer (2014) show that an optimal workfare scheme should be tough on participants (reducing their utility substantially), but actually employ only a small number of people (to reduce the welfare loss of lock-in effects). Theoretical analyses of workfare schemes thus regard work requirements as a necessary evil.

However, it is far from clear that real-life workfare jobs necessarily reduce the utility of the unemployed. In fact, the empirical evidence suggests that, at least from the point of view of the actual participants, workfare might not be so bad after all. Indirect evidence is provided by evaluations of the employment effects of workfare programs. It is commonly observed that workfare participation causes a lock-in effect, i.e. that, while participating in the program, the transition rates into employment are substantially lower for program participants than for non-participating unemployed persons (Huber et al. 2011, Hohmeyer and Wolff 2012). The motivation effect may be offset by a lack of time for the job search although workfare programs typically demand and encourage participants to search for regular jobs, allow them to take time off to go to job interviews, etc. (for Germany, see e.g. Federal Social Court 2008, paragraph 27). An alternative explanation of a lock-in effect could be that participants

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actually do not feel so bad in these jobs. The threat effect of workfare (Black et al. 2003, Geerdsen 2006) may then indicate a selection effect. Those who dislike participating in workfare (e.g. the voluntarily unemployed in the model of Kreiner and Tranæs 2005) will try to leave unemployment faster while this does not seem to be the case for eventual participants. One often observes that exit to employment in the first group takes place in the period between the announcement and the start of the program (“Ashenfelter’s dip”, see e.g. Schneider et al. 2000, Bergemann et al. 2000). This suggests that the group of eventual participants does not feel threatened by the prospect of having to take part in workfare, but instead looks forward to it.

To learn more about how workfare participants actually feel, one can simply ask them. Numerous studies have shown that unemployment is one of the life events that is most detrimental to people’s subjectively reported mental well-being (for a review, see Weimann, Knabe and Schöb 2015). The subjective well-being of workfare participants, however, has not yet been comprehensively studied. Using data from the German Socio-Economic Panel, Knabe and Rätzl (2011) find that participation in public job creation schemes leads to an increase in the life satisfaction of unemployed persons, but not up to the level generated by regular employment. Wulfgramm (2011), who uses data from the German panel study “Labour Market and Social Security”, also finds that the life satisfaction of workfare participants is between that of regularly employed and unemployed people. Moreover, she finds that workfare jobs are especially beneficial for life satisfaction if participants perceive them as increasing their chances of future employment, while the effects are more negative if the jobs are seen as degrading.

These results are in line with findings from social psychology that employment is psychologically beneficial. According to Jahoda (1981, 1982), there are five ‘latent benefits of employment’: employment 1) gives a time structure to the day, 2) allows people to get in contact with others outside the family, 3) forces people to be active, 4) links people with broader goals, and 5) defines personal status and identity. The question is which of these latent benefits can also be provided by workfare. The fact that workfare participants report higher life satisfaction than unemployed people does not allow identifying the specific channels through which workfare may improve well-being. In this paper, we examine the impact of workfare on different subdimensions of subjective well-being. This decomposition of workfare’s well-being effect helps to shed light on the question which of the latent benefits of work matter most for workfare participants.

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We make use of a novel dataset that contains information on both life satisfaction and emotional well-being. Looking separately at these two subdimensions of subjective well-being allows a more comprehensive view of the subjective impact of workfare jobs. To obtain the data, we conducted a survey using the Day Reconstruction Method (DRM). We collected data on how people in workfare measures, as well as regularly employed and unemployed people as comparison groups, use their time on a specific day, their emotional experiences during all activities they were engaged in during the course of that day, their life satisfaction, and their general life circumstances.

Coping strategies play an important part in how strongly people suffer from being unemployed. Jahoda (1982) and Warr and Parry (1982) argue that the possibility of engaging or emphasizing alternative social roles, such as being a spouse or parent, can be used to partially offset the detrimental effect of unemployment. Our findings indicate that the life satisfaction of workfare participants is between that of employed and unemployed people, suggesting that workfare may act as such a coping device that allows involuntarily unemployed people to partially restore their social purpose or social status and reduce the violation of social norms. This also confirms findings from social psychology that suggest that “employment is psychologically supportive, even when conditions are bad” (Jahoda 1981, 188). While previous studies have restricted their attention to the life satisfaction of workfare participants, we also analyze their emotional well-being. We find that the emotional well-being of workfare participants is not only higher than that of unemployed people, but also higher than the emotional well-being of regularly employed persons.

In the following two sections, we describe the institutional regulations of workfare measures in Germany and our survey design. Section 4 then presents the descriptive statistics and Section 5 provides the results from our regression analysis. Section 6 discusses an alternative channel by which workfare may affect subjective well-being. Our final section discusses the findings in the light of the different theories on workfare and concludes.

## **2. Workfare in Germany**

In Germany, workfare mainly refers to the co-called One-Euro Jobs. Officially, they are not mainly intended as an instrument to sanction the unemployed or to increase incentives to regain employment. Rather, according to the German Social Code (SGB II, § 16d Abs. 1), unemployed individuals can be assigned to a workfare measure to sustain or regain

employability.<sup>1</sup> The total assignment period should not exceed 24 months within 5 years (SGB II § 16d, Abs. 6). The local employment agencies could enact binding regulations on how to implement this legal requirement. On average, single workfare measures last 4.4 months (see Statistik der Bundesagentur für Arbeit 2014). In 2008, on average 6.3 % of employable “Unemployment Benefit II”-recipients were employed in workfare measures (see Statistik der Bundesagentur für Arbeit 2014, Table 1.2). For unemployed persons who are assigned to a workfare measure but who refuse to participate without giving a relevant reason (as defined in SGB II § 10), benefit payments can be reduced or withdrawn completely according to SGB II, § 31a (see Bundesagentur für Arbeit, 2013, p. 22). On the other hand, unsolicited applications are possible. There are no strict rules about the weekly hours of work. The weekly work requirement may vary depending on individual abilities and local demands. According to the Federal Social Court (2008, paragraph 1), 30 working hours per week are ‘not unreasonable’ (“nicht unzumutbar”, Bundesagentur für Arbeit, 2013, p. 16). In our sample, we only consider workfare participants who receive some extra payments from the employment agency for additional expenses (SGB II, § 16d). The hourly extra payment is normally in the range between 1 and 2 Euro, with an average of 1.40 Euro (see Statistik der Bundesagentur für Arbeit, 2014).

### 3. Methodology and survey design

Between March and July 2008, we conducted personal interviews with 1,080 persons in Germany (in Berlin and the Magdeburg region) who were either full-time employed, long-term unemployed or long-term unemployed but currently participating in a workfare measure. Our aim was to learn about their subjective well-being, their daily experiences and their life circumstances.

To measure emotional well-being, we applied the Day Reconstruction Method (DRM), which is a combination of a time-use study and the measurement of affective experiences (see Kahneman et al. 2004a, b). Emotional well-being refers to the pleasantness of people’s emotional lives and can be represented by the summation of the strength of positive and negative feelings people actually experience over time (Kahneman 1999). The central point is the measurement of affective experiences of the participants during the previous day. Using a

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<sup>1</sup> SGB II § 16d Abs. 1 S.1: „Erwerbsfähige Leistungsberechtigte können zur Erhaltung oder Wiedererlangung ihrer Beschäftigungsfähigkeit, die für eine Eingliederung in Arbeit erforderlich ist, in Arbeitsgelegenheiten zugewiesen werden, wenn die darin verrichteten Arbeiten zusätzlich sind, im öffentlichen Interesse liegen und wettbewerbsneutral sind.“



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standardized survey questionnaire, we first asked respondents to list all the activities they were engaged in during the course of that day, beginning with the first one after waking up and concluding with the last one before going to bed, and to note the start and end time of each activity. Then, respondents had to describe each activity by answering questions concerning what exactly they did during that activity, with whom they interacted, and how they felt during each activity listed in their diary. We specifically asked respondents to assess how strongly they experienced various affect dimensions on a scale from 0 (“not at all”) to 10 (“very much”). Positive affects were measured using the attributes “relaxed”, “happy”, “comfortable/at ease”, and “enjoying myself”. Negative affects comprised “lethargic/dull”, “insecure/anxious”, “stressed”, and “frustrated/annoyed”.

To compare affective experiences between different individuals, we calculated the net affect  $A$ , a common measure of mood and emotions in the psychology literature (Bradburn 1969). The net affect is constructed in two steps. First, one derives an index of the affective experience during each activity of the previous day. This index is defined as the difference between the average score the respondent gives to all positive attributes and the average score of all negative attributes. Then all activity indexes, weighted with the duration of the activity, are summed up. This time-weighted affective experience of an individual over the course of the entire day yields the net affect  $A$ .<sup>2</sup>

To obtain an overall assessment of their subjective well-being, we asked respondents to answer the question “How satisfied are you with your life as a whole?” on a scale from 0 (“not at all”) to 10 (“very much”). Life satisfaction  $LS$  encompasses global evaluative judgments of one’s life circumstances. People have to create a reference framework for what constitutes the best and the worst possible life and then compare their own life circumstances with these extremes. To do so, people take into account how other people live and how their own life was or will be at other points in time (Dolan and Kahneman 2008). They also consider their purpose and meaning in life, which transcend the day-to-day experiences relevant for affective well-being (Loewenstein 2009).<sup>3</sup> In addition, respondents answered questions about themselves and their life circumstances. In this study, we make use of the information on subjective health status (measured on a scale from 0 (very poor) to 10 (very good)), highest level of vocational education, monthly gross labor income, monthly net

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<sup>2</sup> For a discussion of the net affect and alternative measures of emotional well-being, see Knabe et al. (2010).

<sup>3</sup> Respondents were asked this question about their life satisfaction after they completed the diary part and reported their affective evaluations to avoid that drawing attention to these evaluative issues would influence the responses to questions about their emotional well-being.

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household income, own employment status, weekly working hours (where applicable), marital status/living in a permanent relationship, and number of children living in the household.<sup>4</sup>

From the total of 1,080 interviews, we had to drop 25 interviews due to lack of understanding and missing answers. The remaining 1,055 interviews cover 366 full-time employees, 348 long-term unemployed, and 341 workfare participants. Our interviewers approached the unemployed in the local employment offices and the workfare participants at their workplace. They were asked whether they would like to participate in a survey. If they agreed to participate, they could choose whether the interview would take place directly on site, at their home, or at the local university. We only interviewed long-term unemployed persons eligible for the means-tested “Unemployment Benefit II”. Unemployed and workfare interviewees received a compensation of 10 euros. To recruit employed respondents, we randomly selected addresses from the telephone directory of the district of the employment offices. We then sent a letter in which we briefly explained the purpose of our study (without yet mentioning that we would ask respondents to provide information about their time-use and feelings) to these households and told them that we had selected them to participate in the study. Within three days, we gave all these households a telephone call to make an appointment for the face-to-face interview, which then took place either at the university or at the interviewee’s home. Of all the people contacted and willing to talk to us on the phone, 55 percent were in the target group, i.e. full-time employed.

#### **4. Descriptive statistics**

Table 1 summarizes some descriptive statistics for the three subsamples: the employed, the unemployed, and the workfare participants. While the three groups are very similar with respect to some personal characteristics, there are larger differences with respect to other characteristics. Employed people enjoy a substantially higher net household income, are more often married or cohabiting, and have had higher vocational qualifications than both other groups. They also work longer than workfare participants. Workfare participants have experienced about 24 weeks more unemployment in their ongoing spell than the unemployed we interviewed.

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<sup>4</sup> Knabe et al. (2010, Online Appendix) provide a translated version of the questionnaire. The questionnaire is also available from the authors upon request.

*Table 1: Descriptive statistics*

	Employed	Workfare	Unemployed
Age	44.2	43.0	38.2
Male	50.3%	49.6%	50.3%
Gross Labor Income	3,014 €	186 €	
Net HH Income	2,974 €	1,076 €	890 €
No degree	2.7%	23.8%	22.1%
Vocational qualification	42.6%	69.5%	63.8%
University degree	54.6%	6.7%	14.1%
Married/Cohabiting	72.4%	50.7%	44.0%
Children in HH	0.6	0.5	0.4
Persons in HH	2.2	1.9	1.9
Health satisfaction	7.5	6.6	6.1
Working Hours per Week	41.5	29.2	
Unemployment duration in weeks (mean)		70.3	46.3
Unemployment duration in weeks (median)		53.8	31.4
Volunteering	23.8%	13.6%	14.1%
Wake-up time	6:39	6:24	7:41
Go-to-sleep time	23:08	22:52	23:23
Time Slept during the day	0:04	0:05	0:15
Time Awake during the day (h:min)	16:24	16:22	15:27
Number of distinct activities	12.7	12.6	12.0
Average length of each activity (h:min)	1:17	1:18	1:18
Weekday	85.0%	81.8%	81.9%
Weekend	15.0%	18.2%	18.1%
Observations	366	341	348

Table 2 presents the net affect  $A$  for different activities, broken down by employment status, with activities being sorted by their mean net affect for the workfare participants. First, Table 2 shows what Knabe et al. (2010) call the saddening effect: unemployed persons have roughly the same ranking of activities as employed persons, but show lower net affect scores in most activities. By contrast, Table 2 shows that for most leisure activities, workfare participants exhibit the highest net affect scores. They thus enjoy leisure activities not only more than the unemployed, but also more than the employed. In contrast to the saddening effect, we might call this the excitement effect or hedonic effect of workfare.

Table 2: Well-being and time-use by activity and employment status

Activity	Net Affect			Mean hours per day (h:min)			Share of Sample Reporting		
	E	WF	UE	E	WF	UE	E	WF	UE
Parlor / Computer Game	6.79 (0.677)	7.13 (0.079)	5.66 (0.097)	5:05	4:08	2:15	7%	4%	11%
Socializing	6.72 (0.482)	6.95 (0.088)	6.23 (0.020)	2:16	2:24	2:50	48%	43%	58%
Relaxing / Walk	5.75 (0.021)	6.76 (0.033)	4.43 (0.000)	1:45	1:24	1:26	21%	19%	22%
Reading / Radio / Music	6.02 (0.671)	6.19 (0.000)	4.61 (0.000)	1:47	2:21	1:52	36%	21%	28%
Eating	6.17 (0.485)	6.06 (0.000)	5.00 (0.000)	1:39	1:38	2:06	92%	95%	98%
Hobby /Sport	6.53 (0.358)	6.05 (0.113)	5.68 (0.499)	2:32	2:46	2:57	20%	13%	23%
Watching TV	5.27 (0.024)	5.79 (0.000)	4.39 (0.000)	2:54	2:58	3:41	73%	82%	79%
Break during Work	5.45 (0.755)	5.55	---	0:33	0:48	0:00	37%	48%	0%
Childcare	4.00 (0.003)	5.22 (0.036)	4.89 (0.409)	1:48	2:35	3:28	21%	33%	31%
Working	2.72 (0.000)	4.84	---	6:32	5:01	0:00	68%	70%	0%
Commuting	3.08 (0.000)	4.13	---	0:48	0:59	0:00	47%	61%	0%
Shopping	2.98 (0.000)	3.90 (0.374)	2.55 (0.003)	0:59	1:07	0:54	21%	37%	31%
Housework	3.70 (0.746)	3.79 (0.000)	2.78 (0.000)	2:12	2:41	3:12	60%	81%	78%
Travel	4.27 (0.011)	2.95 (0.001)	3.08 (0.792)	1:17	1:31	1:14	23%	32%	36%
Job Seeking	2.78 (0.764)	1.83 (0.518)	0.83 (0.349)	1:16	0:22	1:50	1%	2%	25%

Note: E – Employed, WF – Workfare, UE – Unemployed; p-values for the t-test of whether the scores for two respective groups are equal are given in parentheses (left: E vs WF, middle: E vs UE, right: WF vs UE). Mean hours per day are conditional on engaging in that activity. We report only activities in which at least 10% of one of the groups engaged. Activities are sorted by their mean net affect for the workfare participants.

Not only do workfare participants score high in leisure activities. In contrast to employed respondents who report very low satisfaction scores during all employment-related activities, workfare participants seem to enjoy these activities. With an average net affect of 4.84, working ranges between childcare and shopping, far above the average score of 2.72 of regularly employed people, for whom working belongs to the least satisfying times of the day.

Work demands the largest share of time for both the employed and workfare participants. The employed spend about 6.5 hours per day at work while workfare participants spend only 5 hours at work. Commuting time is, on average, 48 minutes per day for the regularly employed and 59 minutes for workfare participants. Concerning time spent on leisure activities, we do not find big differences between the three subgroups. However, the unemployed can allocate more time to other activities. Table 1 already shows that the unemployed sleep almost one hour longer than regularly employed and workfare participants. In addition, they spend much more time on relatively positive leisure activities such as socializing or childcare but also on lower ranked activities such as watching TV and doing household chores. While we hardly observe any job-seeking activities for both employed respondents and workfare participants (which is already suggestive evidence that workfare does not seem to spur participants to engage in more job searching), 25% of the unemployed respondents reported job search activities during the previous day, with an average duration of almost two hours.

*Table 3: Decomposing the net affect*

	Life Satisfaction	Net Affect	
<b>Unemployed</b>	<b>4.583</b>	<b>4.239</b>	
Hedonic effect	---	+0.750	↓
Time-composition effect	---	+0.194	↓
<b>Workfare</b>	<b>5.496</b>	<b>5.183</b>	
Hedonic effect	---	+0.932	↑
Time-composition effect	---	+0.027	↑
<b>Employed</b>	<b>7.115</b>	<b>4.224</b>	
Difference between workfare and unemployed	<b>+0.912</b> (0.000)	<b>+0.944</b> (0.000)	
Difference between workfare and employed	<b>-1.619</b> (0.000)	<b>+0.959</b> (0.000)	
Difference between unemployed and employed	<b>-2.531</b> (0.000)	<b>+0.015</b> (0.936)	

*Note: p-values for  $H_0: \text{difference}=0$  in parentheses. Arrows indicate the direction of summation.*

In Table 3 we compare average life satisfaction and average net affect of the workfare participants with those of the employed and those of the unemployed. The regularly employed report the highest life satisfaction but the lowest net affect of all three subgroups. Workfare participants report higher life satisfaction scores than the unemployed but lower scores than the regularly employed. This result is in line with the findings by Knabe and Rätzel (2011) and Wulfgramm (2011), who used two different German panel datasets. For the net affect,

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however, we find a different rank ordering. The net affect of the workfare participants is substantially and significantly higher than both the net affect of the employed and the unemployed.

We can decompose the overall difference of the net affect between the unemployed and the workfare participants analytically by applying a thought experiment developed by Knabe et al. (2010). We first calculate how the average net affect of all the unemployed persons would change if they experienced the same average net affect as the workfare participants in all specific activities. The difference in affective well-being in the same activities corresponds to the *hedonic effect*. In addition, the second effect, the *time-composition effect*, concerns how much time a person allocates to each activity and measures how the different time structure changes average affective well-being. While the unemployed spend their whole time on leisure activities (except for job search activities), the workfare participants spend 5 hours working and an additional hour commuting. As we know already from the results in Table 2, workfare participants report higher well-being scores in almost all activities. The hedonic effect is thus positive and actually accounts for most of the total difference in the average net affect. The remaining time-composition effect of +0.194 is small, as the average score for work-related activities is comparable with the net affects for leisure activities that workfare participants had to cut down.

When comparing the net affect scores of workfare participants with the employed, a similar picture emerges. When assigning the average net affect levels of the workfare participants to the employed without any adjustments in time use, the average net affect of the employed would rise by +0.932 while the time-composition effect is almost negligible. The total picture, however, looks quite different. While life satisfaction is much lower for workfare participants, this is not true for their affective experiences. Overall, workfare participants enjoy the day more than the employed but they are nevertheless dissatisfied with their life circumstances. This is suggestive evidence that workfare participants suffer from a loss in social status or from not meeting social norms compared to having regular work. However, when compared to “being unemployed”, workfare benefits the workfare participants in both respects. They both enjoy the course of the day more than the unemployed do and are more satisfied with their life circumstances.

## 5. Regression analysis

The observed differences in life satisfaction and emotional well-being between the three groups could be influenced by differences in other characteristics. To isolate the relationship between employment status and subjective well-being, we make use of regression analyses in which we can control for the impact of other observable differences between survey respondents.

Using regressions also allows us to disentangle cognitive and affective aspects of subjective well-being. Life satisfaction is a compound measure reflecting both cognitive and emotional aspects of well-being (see e.g. Diener et al. 2009, Kahneman and Deaton 2010). The cognitive well-being component concerns the conscious assessment of how one's achievements relate to one's aspirations. To conduct this assessment, people compare their own life circumstances with those of other people at the same time and with their own life at other points in time (Dolan and Kahneman 2008) and they ask themselves about purpose and meaning in life (Loewenstein 2009), something that certainly transcends day-to-day affective experiences. Furthermore, the cognitive component also comprises expectations concerning future prospects (Knabe and Rätzel 2011). In addition to cognitive judgments, contemporaneous affective experiences will also enter one's evaluation of life satisfaction (Diener et al. 2009). Hence, cognitive well-being cannot be measured directly in our survey. However, cognitive well-being can be deduced from the two available measures of life satisfaction and net affect. Reported life satisfaction  $LS$  can be used as an empirical proxy for total subjective well-being or utility (see e.g. Frey and Stutzer 2002), which may be represented by a life satisfaction function that depends on both a person's contemporaneous affective experiences  $A$  and the (non-observable) cognitive assessment of her life  $C$ . Both components of subjective well-being ( $C$  and  $A$ ) depend to different degrees on a set of contemporaneous factors (such as income, health, family status, age, or the number of children). Identifying the different channels by which workfare impacts subjective well-being thus requires taking the differences in other influential factors into account.

When comparing workfare participants with the unemployed, we could see from the descriptive statistics that workfare is associated with higher life satisfaction. This does not immediately imply that this is related to higher cognitive well-being because the increase in life satisfaction might be fully attributable to the higher level of affective well-being. When comparing the workfare participants with the regularly employed, however, Table 2 suggests

that the difference in global well-being is mainly cognitive by nature since the differences in average net affect and average life satisfaction are of opposite sign.

To further disentangle the two channels by which life satisfaction may be affected, we make use of a regression analysis that takes into account individual differences in various individual factors. We first regress net affect  $A$  and life satisfaction  $LS$  on the two states ‘employed’ ( $EMP$ ) and ‘workfare participants’ ( $WF$ ) and on personal economic and socio-demographic characteristics (represented by the vector  $\mathbf{X}_i$ ):

$$SWB_i = \alpha + \beta_1 \cdot EMP_i + \beta_2 \cdot WF_i + \gamma' \cdot \mathbf{X}_i + \varepsilon_i, \quad \text{where } SWB_i = \{A_i, LS_i\}, \quad (1)$$

with  $\alpha$  indicating the intercept and  $\varepsilon_i$  indicating the individual error term. Then, we regress life satisfaction  $LS$  on personal economic and socio-demographic characteristics, while controlling for individual differences in affective experiences  $A$  (allowing for a potentially quadratic relationship). By controlling for all influences on  $LS$  via  $A$ , we can isolate the residual cognitive impact of being employed or participating in a workfare measure – rather than being unemployed – on life satisfaction. The corresponding regression equation is

$$LS_i = \alpha + \beta_1 \cdot EMP_i + \beta_2 \cdot WF_i + \beta_3 \cdot A_i + \beta_4 \cdot A_i^2 + \gamma' \cdot \mathbf{X}_i + \varepsilon_i. \quad (2)$$

### 5.1 Regression results

Table 4 presents the estimation results for the regression equations (1) and (2). In column 1, we reproduce the results for the net affect already reported in Table 3. In column 2, we add demographic variables to the regression, including household income. Living in a partnership hardly affects affective experiences. Respondents with a vocational qualification show a significantly higher net affect than people with university education or those without any qualifications. Household income has almost no impact on a person’s net affect during the course of the day. Participating in a workfare measure, however, is associated with significantly and substantially higher net affect scores compared to the unemployed. In addition, as the F-test shows, workfare participants also report much higher affective well-being scores than the regularly employed.



Table 4: Regression results

	Net affect		Life satisfaction		
	(1)	(2)	(3)	(4)	(5)
Employed (EMP)	-0.015 (0.191)	-0.343 (0.288)	2.531*** (0.166)	1.371*** (0.236)	1.459*** (0.219)
Workfare (WF)	0.944*** (0.199)	0.730*** (0.200)	0.912*** (0.191)	0.758*** (0.190)	0.562*** (0.185)
Net affect					0.342*** (0.086)
(Net affect) <sup>2</sup>					-0.009 (0.009)
Female		0.261* (0.150)		0.225* (0.131)	0.162 (0.125)
Age		-0.062 (0.052)		-0.106** (0.048)	-0.086* (0.045)
Age <sup>2</sup>		0.001 (0.001)		0.001* (0.001)	0.001 (0.001)
Married/cohabiting		0.098 (0.173)		-0.130 (0.148)	-0.159 (0.144)
Health status		0.315*** (0.034)		0.303*** (0.031)	0.219*** (0.031)
Vocational training		0.514** (0.249)		0.476** (0.230)	0.337 (0.217)
University education		-0.176 (0.306)		0.670** (0.277)	0.707*** (0.255)
Number of children		0.115 (0.075)		0.018 (0.060)	-0.006 (0.059)
ln (household income)		0.008 (0.172)		0.620*** (0.149)	0.611*** (0.144)
Constant	4.239*** (0.146)	2.711* (1.444)	4.583*** (0.140)	0.402 (1.311)	-0.415 (1.238)
Observations	1,055	1,037	1,055	1,037	1,037
R <sup>2</sup>	0.030	0.144	0.179	0.302	0.368
F-test WF vs EMP	27.52	17.49	105.00	8.299	20.01
p-value	0.000	0.000	0.000	0.004	0.000

Robust standard errors in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Column 3 reproduces the results for life satisfaction shown in Table 3. In the fourth column, we add demographic variables to the regression, including income. The workfare coefficient falls slightly but remains highly significant. Hence, adding demographic controls and, in particular, household income to the regression hardly changes the effect of workfare participation on life satisfaction while it almost halves the size of the employment coefficient, which nevertheless remains large and highly significant. Women report slightly higher life satisfaction (significant at the 10 % level). Life satisfaction is U-shaped in age. People that report to be in better health are also more satisfied with life.<sup>5</sup> Participants with higher

<sup>5</sup> This could be because health is an important determinant of quality of life in and of itself, but since our data is cross-sectional and not a panel, we cannot preclude the possibility that this correlation captures differences between general degrees of optimism between people that simultaneously affect the life satisfaction and health assessment measures. Hence, the use of subjective health assessments in such regressions could also be

education levels report a significantly higher satisfaction with their life in general and so do participants with higher household income. The observation that household income has almost no impact on the net affect score while it has a very strong impact on life satisfaction is in line with the results reported by Kahneman and Deaton (2010) and Diener et al. (2009).

Adding the reported net affect in column 5 shows that the net affect has the expected positive effect on life satisfaction for all groups. The employment coefficient does not change much, compared to column 4, and remains highly significant when controlling for the net affect. The workfare coefficient becomes smaller but also remains highly significant. We can interpret these coefficients as the cognitive impact of employment and workfare on life satisfaction. Hence, workfare has a positive impact on life satisfaction that goes beyond the large increase in the net affect we report in columns 1 and 2. Participating in a workfare measure thus raises not only affective well-being but also cognitive well-being above the level experienced by the unemployed. Cognitive well-being in workfare is, however, significantly lower than in regular employment.

Finally, we conducted some robustness checks with modified net affect measures that were calculated by subsequently leaving out one of the eight affects. This does not affect our results. Hence, we do not find evidence that a single affect drives our findings. In another check, we allow all components of  $A$  to have different effects of  $LS$  by adding them in separately. All results remain qualitatively unchanged. Using the U-Index and the episode satisfaction as alternative measures for the emotional well-being (see Knabe et al. 2010) also provides the same qualitative results.

### 5.2. Voluntary versus forced workfare

We have some information about why workfare participants decided to take part in the workfare measure. We asked workfare participants for their reason for currently being on workfare. Most workfare participants ( $n = 152$ ) answered that “being able to work” was the reason for taking up workfare, with earning extra income ( $n = 81$ ), the hope for a permanent job offer ( $n = 59$ ), and fear of benefit cuts ( $n = 22$ ) being the other answers participants provided. 27 stated “other reasons”.

277 workfare participants actively tried to get the current workfare job, which implies that most workfare participants in our sample were apparently participating voluntarily. This, however, does not imply that the other workfare participants were forced to take up the job.

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interpreted as capturing personality traits. In this paper, health satisfaction is used as a control variable only, so we do not interpret this coefficient further.

Since we do not have information from the employment agency that would allow us to clearly identify forced workfare participants, we decided to subsume all workfare participants under the heading of “forced workfare” if both of the following two conditions were fulfilled: i) they did not actively apply for the current workfare job and, if applicable, did not actively apply for the last preceding workfare job either, ii) they stated that the reason for participating in the workfare job was that they were “afraid of benefit cuts” if they rejected this job assignment. In total, we can identify 35 workfare participants who belong to this group. All other workfare participants are subsumed in the category “voluntary workfare”.

Table 5: Forced vs voluntary workfare

	Net affect		Life satisfaction		
	(1)	(2)	(3)	(4)	(5)
Forced workfare (WFf)	0.668 (0.459)	0.370 (0.456)	1.360*** (0.409)	1.176*** (0.368)	1.075*** (0.369)
Voluntary workfare (WFv)	0.976*** (0.204)	0.773*** (0.205)	0.861*** (0.196)	0.708*** (0.197)	0.499*** (0.192)
Employed (EMP)	-0.015 (0.191)	-0.335 (0.288)	2.531*** (0.166)	1.361*** (0.237)	1.447*** (0.220)
Net affect					0.343*** (0.086)
(Net affect) <sup>2</sup>					-0.009 (0.009)
Female		0.263* (0.150)		0.223* (0.131)	0.159 (0.125)
Age		-0.065 (0.051)		-0.103** (0.048)	-0.083* (0.045)
Age <sup>2</sup>		0.001 (0.001)		0.001* (0.001)	0.001 (0.001)
Married/cohabiting		0.102 (0.173)		-0.134 (0.148)	-0.165 (0.144)
Health status		0.315*** (0.034)		0.304*** (0.031)	0.219*** (0.031)
Vocational training		0.515** (0.248)		0.474** (0.230)	0.334 (0.216)
University education		-0.176 (0.305)		0.670** (0.277)	0.707*** (0.255)
Number of children		0.118 (0.075)		0.014 (0.060)	-0.011 (0.059)
ln (household income)		0.004 (0.172)		0.625*** (0.150)	0.617*** (0.144)
Constant	4.239*** (0.146)	2.790* (1.441)	4.583*** (0.140)	0.310 (1.316)	-0.531 (1.241)
Observations	1,055	1,037	1,055	1,037	1,037
R <sup>2</sup>	0.031	0.145	0.180	0.303	0.370
F-test: WF forced vs EMP	2.276	2.048	8.832	0.211	0.886
p-value	0.132	0.153	0.003	0.646	0.347
F-test: WF voluntary vs EMP	27.741	18.409	103.031	9.263	21.862
p-value	0.000	0.000	0.000	0.002	0.000
F-test: WF forced vs. voluntary	0.452	0.786	1.493	1.610	2.433
p-value	0.502	0.376	0.222	0.205	0.119

Robust standard errors in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

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In Table 5 we run the same regressions as shown in Table 4 but distinguish between ‘forced workfare’ and ‘voluntary workfare’. We find that the forced workfare participants show, on average, a net affect that exceeds both the net affect of the unemployed and the employed but the difference is not significant. The net affect of the voluntary workfare participants is significantly larger than the net affect scores reported by both the unemployed and the employed. The finding that voluntary workfare participants enjoy the course of the day much more than the unemployed while this cannot necessarily be said for the forced workfare participants, might indicate that the estimated positive emotional effect of workfare is partly due to a selection effect.

Column 3 shows that the average life satisfaction scores of both workfare groups are significantly higher than that of the unemployed, but less than that of the employed. Adding the demographic controls and household income in column 4 shows that health, education, and income have the expected sign. Adding the reported net affect in column 5 shows that the net affect score has a positive and significant effect on life satisfaction for all groups.<sup>6</sup> The employment coefficient remains highly significant when controlling for the net affect.

The coefficient for voluntary workfare becomes smaller but remains significant at the 1 % level. The coefficient for forced workfare is larger than the coefficient for voluntary workfare, although the F-test indicates that the difference is not significant. This might be surprising at first glance as one might expect that the life satisfaction or cognitive well-being of the forced participants should be lower than that of the voluntary participants. However, it might be that those people who are unhappiest about being unemployed are also those who apply voluntarily for a workfare measure.<sup>7</sup> Participating in workfare improves their well-being, but not sufficiently to close the gap with those who were forced into the workfare job.

As both forced workfare and non-forced workfare participants show higher life satisfaction scores than the unemployed, this indicates that workfare may work as a status-restoring device, irrespectively of whether the job has been taken up voluntarily or not. Participating in a workfare measure thus raises not only the affective well-being but also the cognitive well-being beyond the level the unemployed experience. Due to the low number of identified forced workfare participants, this conclusion should be treated with caution.

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<sup>6</sup> Further (unreported) estimations show that the relationship between the net affect and life satisfaction does not differ significantly between groups.

<sup>7</sup> In line with this argument, Clark, Knabe and Rätzel (2010) show that the more life satisfaction falls upon entering unemployment, the more actively people search for a new job and the more wage concessions they are willing to make to obtain a new job.

As the F-tests show, the forced-workfare coefficients for the net affect are both significantly higher than the respective employment coefficients while the forced-workfare coefficient for life satisfaction is not significantly different to the employment coefficient, when controlling for the net affect. We do not find any significant differences when comparing the voluntary workfare coefficients with the coefficients for forced workfare participants.

## **6. Workfare: just a “holiday from unemployment”?**

From previous research on the psychological cost of unemployment cited above, we would expect that workfare participation raises the cognitive well-being of many unemployed people as it allows them to partially restore their social status and their identity. By contrast, we would also expect workfare to have little impact on the affective components of subjective well-being as previous research has shown that unemployed and regularly employed people show no significant difference in their emotional well-being, which might be explained by hedonic adaptation (see Knabe et al. 2010). The findings presented in this paper, however, show that affective well-being is significantly higher for workfare participants than for the employed and the unemployed. Since almost all existing workfare schemes are temporary by design and allow people to apply for them voluntarily, existing workfare measures may provide a *temporarily* beneficial escape from the monotony of the daily routines of being unemployed. Such a ‘*holiday-from-unemployment*’ effect may yield a temporary utility gain for unemployed people by raising their emotional well-being, which would fade away over time if participation in a workfare measure were permanent.

A well-designed field experiment that separates the temporary and permanent effects of workfare schemes could help identify the different channels by which the participants’ utilities are affected. Unfortunately, such a field experiment is not at hand. Nevertheless, by deriving data on both cognitive and affective well-being from people in existing workfare measures, we can distinguish between the two channels. First, we find that the cognitive well-being is higher than that of the unemployed but lower than that of the regularly employed. This result indicates that workfare indeed acts as a coping device that allows the unemployed to partly restore the identity they derive from working. Second, the workfare participants have a similar daily time structure to regularly employed people with the result that they should show similar levels of affective well-being. Contrary to this expectation, workfare raises the affective well-being of participants beyond the affective well-being of the unemployed and

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even beyond that of the employed. Apparently workfare participants enjoy being in workfare measures over the course of a day. They enjoy working time more than the regularly employed, which hints at the existence of a holiday-from-unemployment effect, in analogy to the honeymoon effect one observes when people change jobs (see Connolly and Viswesvaran 2000, Chadi and Hetschko 2013).

Differences in the affective well-being during working time may also be explained by factors we cannot control for, such as differences in work strain. However, the decomposition of the net affect has shown that the affective experience of leisure time is also higher for workfare participants than for members of the other two groups. This latter observation provides further evidence of a holiday-from-unemployment effect. Breaking out of the monotonic daily routines of being unemployed not only makes engaging in new activities more exciting, but also improves the experience of those (leisure) activities that the individual has already engaged in before. To the extent that we can expect hedonic adaptation, we can expect (though not prove) that the higher net affect the workfare participants report for their leisure activities relative to the net affect reported by the employed is only transitory and thus due to the temporary nature of workfare. It is a subject of further research to analyze whether this effect on affective well-being would prevail if workfare participation were permanent.

## **7. Conclusion**

In our study of German workfare participants, we found that people in workfare jobs have a higher life satisfaction than unemployed people, but are less satisfied with their lives than regularly employed individuals. The affective well-being of workfare participants is significantly higher than that of the employed and the unemployed. Since we find that the impact of workfare on life satisfaction goes beyond the changes in affective well-being, we conclude that workfare also raises cognitive well-being. Apparently, workfare helps to partially restore identity utility that has been lost when being unemployed because it may be rewarding to work for one's own living, to reciprocate society's support, or to fulfill some social work norm (cf. Schöb 2013).

These findings stand in stark contrast to the standard view of workfare, according to which work requirements in unemployment support schemes reduce the utility of the unemployed. Workfare is typically seen as a necessary evil because only by lowering the well-being of the unemployed (without reducing income support below a socially acceptable level) is it possible to improve the general functioning of the labor market. In a model with

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search-and-matching unemployment, workfare would make unemployment less attractive. This reduces the bargaining power of currently employed workers, which leads to lower equilibrium unemployment (Andersen and Svarer 2014). Workfare could also be used to separate the voluntarily from involuntarily unemployed persons, which allows better targeting of income support to the truly needy (Kreiner and Tranæs 2005). Our findings challenge the standard view by suggesting that workfare participants actually feel good when participating in workfare schemes. Their average subjective well-being, both in its cognitive and affective dimensions, is higher than that of comparable unemployed persons who do not participate in workfare. This could mean that workfare neither exerts a threat nor a motivation effect. Workfare would then miss its aim of improving the general functioning of the labor market and become an ineffective and perhaps even counterproductive policy instrument. This negative view is compatible with previous evaluations of the employment effects of workfare schemes, which regularly found substantial lock-in effects and unfavorable employment outcomes for workfare participants (Huber et al. 2011, Hohmeyer and Wolff 2012).

But do these results necessarily imply that workfare cannot play the role assigned to it in theoretical analyses of efficient unemployment insurance or poverty alleviation programs that require that workfare reduces the utility of the unemployed? Not necessarily. If workfare is meant to separate the voluntarily from the involuntarily unemployed, as in the model by Kreiner and Tranæs (2005), workfare might still exercise a strong threat effect on the voluntarily unemployed as intended. After all, we have mainly observed voluntary workfare participants in our survey, so we cannot rule out that non-participants would have shown a much lower subjective well-being in workfare than that found in our study. Indeed, previous studies suggest that workfare programs can have substantial threat effects. For instance, Feist and Schöb (1998) report that about 1/3 of the long-term unemployed in Leipzig quit the social assistance system when forced into a longer-lasting comprehensive mandatory municipal workfare measure. Black et al (2003) for the USA and Geerdsen (2006) for Denmark also find that the threat of mandatory participation in workfare programs after some period of unemployment actually motivates individuals to find regular employment prior to participation. This hints at a selection effect. While workfare, on the one hand, exercises a threat for some unemployed people or people whose job is at risk, our study suggests that workfare measures alleviate the burden of unemployment for those unemployed who eventually participate. The case for using workfare as an efficient policy tool might thus be even stronger than standard theory suggests. However, more research, both on the theoretical effects of workfare in the presence of heterogeneous types of workers as well as on the

empirical effects of workfare is needed to substantiate this idea. In this regard, the life satisfaction approach turns out to be very promising.

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