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ORIGINAL RESEARCH

General Engagement: Conceptualization and Measurement with the Utrecht General Engagement Scale (UGES)

Wilmar B. Schaufeli ^{1,2} 🕞

Published online: 17 August 2017

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Abstract There is no compelling psychological reason why psychological engagement should be restricted to employees. For instance, sports, volunteering, hobbies, leisure activities, and education can also be pursued with energy and determination. Hence, the current study introduced the concept of general engagement and its measurement with the Utrecht General Engagement Scale (UGES) - the general version of the Utrecht Work Engagement Scale (UWES). Using a representative sample of the Dutch population (N = 3970) the discriminant validity of the UGES (and the UWES) vis-à-vis positive and negative affectivity as well as life satisfaction was demonstrated. Like work engagement, the overlap of general engagement with Big-5 personality factors is less than 10%. Mean scores on the UGES for employees and volunteers are highest, whereas scores for the work incapacitated or unemployed are lowest. It is concluded that the UGES can be used in future research on engagement in daily, non-work activities.

 $\textbf{Keywords} \ \ \text{General engagement} \cdot \text{Work engagement} \cdot \text{Measurement} \cdot \text{Personality} \cdot \text{Satisfaction} \\ \text{with life} \cdot \text{Affect}$

Introduction

The Merriam-Webster dictionary defines engagement as 'the state of being in gear', meaning that people 'who are in gear' proceed with energy and determination. In the scientific literature engagement is predominantly used in relation to work – either dubbed

Electronic supplementary material The online version of this article (doi:10.1007/s41543-017-0001-x) contains supplementary material, which is available to authorized users.

Wilmar B. Schaufeli wilmar.schaufeli@kuleuven.be



Research Unit Occupational & Organizational Psychology and Professional Learning, University of Leuven, Leuven, Belgium

Department of Psychology, Utrecht University, Utrecht, Netherlands

employee engagement (in management) or work engagement (in psychology). Despite this semantic difference, whereby employee engagement refers to the *person* (employee) who is engaged and work engagement to the *object* of engagement (work), both terms are used interchangeably.

There is *no* compelling psychological reason why engagement should be restricted to employees and to the realm of work since other actions and behaviors can similarly be pursued with energy and determination, such as sports, volunteering, hobbies, leisure activities, education, or even household chores. Therefore, this paper introduces the notion of general engagement and argues that individuals who are not employed in any kind of job may also feel 'engaged' in performing activities, whatever their nature. The purpose of the current paper is to stimulate research on engagement outside the work context, for instance among students, athletes, retirees, and volunteers by proposing a valid and reliable measure to assess levels of general engagement.

Specific and Generic Engagement

Kahn (1990) is credited for introducing 'personal engagement', which he defined as 'the harnessing of organization members' selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performances' (p. 694). Drawing on the seminal work of role-theorist Goffman (1959), who focused on fulfilling *any* kind of social role, Kahn describes engagement in terms of how people occupy and adjust to their *work* roles. But returning to the roots of Kahn's theorizing, one might argue that people employ and express themselves physically, cognitively, emotionally, and mentally during *any* role performance. Following this reasoning, also students, athletes, housewives, self-employed people, unemployed persons, volunteers, and retirees may be 'engaged' since they occupy social roles. That means that they display a set of connected behaviors, which are regulated by specific rights, obligations, expectations, beliefs, and norms; albeit that some roles (e.g., students, self-employed) are more clearly described than others (e.g., volunteers, retirees). Hence, following the logic of Goffman (1959), the concept of personal engagement as introduced by Kahn (1990) can be extended beyond the work role for which it was originally designed.

Another approach to work engagement is advocated by Schaufeli and colleagues, who define it as: 'a positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption' (Schaufeli et al. 2002b; p.74), whereby vigor refers to high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties; dedication refers to being strongly involved in one's work, and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge; and absorption refers to being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Rather than referring to the work *role*, this alternative conceptualization of engagement refers to the work *activities* the employee performs.

In fact, 'work activities' go beyond employment and may also refer to other structured, goal-directed activities outside the work-context, which are compulsory in nature. For instance, students also perform 'work', not in terms of paid employment but psychologically speaking. Students follow classes and prepare for exams, and athletes play in a league and comply with a training scheme (structured and goal directed activities), and neither students nor athletes can discontinue their activities without facing negative consequences (compulsory



nature). For that very reason, the concept of academic engagement has also been applied to students (Schaufeli et al. 2002a). But one could go even a step further and argue that *any* activity – and not only those activities that can be labeled as 'work' in the psychological sense – may be pursued with energy, involvement and focus. Following this reasoning a person may experience a sense of engagement when pursuing a hobby, spending time with grandchildren, fixing things at home, or reading. In other words there seems no compelling psychological reason why engagement as a positive, fulfilling psychological state should be restricted to work and cannot be generalized to other daily activities.

Based on the previous considerations, general engagement is defined as a positive and fulfilling state of mind that is associated with performing *daily activities of any sort* and is characterized by vigor, dedication, and absorption. Seen from this perspective, work engagement is a special case of general engagement, whereby daily activities refer to one's work. The concept of general engagement may be applied to other roles than the work role and to all kinds of activities that may, or may not, concur with the psychological definition of work.

However, there is also a theoretical reason for introducing general engagement. It appears that the satisfaction of the basic psychological needs of and autonomy, belongingness and competence fosters work engagement (Van den Broeck et al. 2008). Self-Determination Theory (Deci and Ryan 2000) considers these needs as nutriments to maintain the individual's growth, integrity and health. Satisfaction of these needs is essential for humans to actualize their potentials and to flourish; that is, to be engaged. Basic need satisfaction not only occurs at work, but also in other life domains including sports, leisure, schooling, education, and interpersonal relationships (Deci and Ryan 2000). In fact, a study among students showed that all three basic psychological needs are positively associated with academic engagement, also after controlling for the Big-5 personality traits (Sulea et al. 2015). Based on this reason, it makes perfect sense to introduce general engagement because a major driving force – the satisfaction of the needs for autonomy, belongingness and competence – may also occur outside the realm of work.

The conceptualizations of engagement by Kahn (1990) and Schaufeli et al. (2002a, b) agree since both entail a physical-energetic (vigor), an emotional (dedication), and a cognitive (absorption) component. The similarity between both definitions is further illustrated by their operationalizations. Based on the work of Kahn (1990), May et al. (2004) developed an engagement inventory that includes: cognitive, emotional and physical engagement. The items of this inventory show a striking resemblance with those of the absorption, dedication, and vigor scales of the Utrecht Work Engagement Scale (UWES; Schaufeli et al. 2002a, b), respectively. Furthermore, it was shown that the corresponding subscales of both inventories were moderately positively correlated (Viljevac et al. 2012). The equivalence of the conceptualization and operationalization of engagement by Kahn and Schaufeli presents a strong case for its construct validity.

Taken together, a conceptual and empirical basis exists to develop a scale to tap general engagement by rewording the work-related items of the UWES in such a way that they refer to the respondent's daily activities. This new scale is dubbed Utrecht General Engagement Scale (UGES) and is based on the UWES because this scale has good psychometric properties (see Schaufeli and Bakker 2010, for an overview). For instance, the shortened 9-item version showed good factorial validity, albeit that the three factors (vigor, dedication, and absorption) are very highly correlated so that it is recommended to use one composite work engagement score (Schaufeli et al. 2006; De Bruin and Henn 2013). Moreover, a meta-analyses showed that the internal consistency of the UWES is very high across 33 samples from 8 different countries (n = 19,940); Cronbach's α exceeds .90 for the composite work engagement scale (Schaufeli 2012).



The current study sets out to investigate the psychometric features of the UGES. More specifically, the first aim is to assess its reliability and factorial validity, as compared with the UWES. The second aim is to assess the discriminant validity of the UGES vis-à-vis affectivity, satisfaction, and personality characteristics, again with the UWES as point of reference.

Engagement, Affectivity, and Satisfaction

When engagement is expanded beyond the work context, the danger exists that it will overlap with other engagement-like concepts such as affectivity and satisfaction (Macey and Schneider 2008). Affectivity reflects individual differences in positive and negative emotional reactivity. According to Watson et al. (1988), positive Affect (PA) 'reflects the extent to which a person feels enthusiastic, active, and alert. High PA is a state of high energy, full concentration, and pleasurable engagement' (p. 1063). In contrast, Negative Affect (NA) 'is a general dimension of subjective distress and unpleasant engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness' (p. 1063). Instead of being each other's opposites, both personality factors are independent and unrelated. It follows from the definition of affectivity that this individual difference variable is related to engagement. Indeed, Bosman et al. (2005) observed that work engagement is moderately correlated with both PA (r = .51) and NA (r = -.43) in a sample of South African civil servants.

In a similar vein, job satisfaction and work engagement are positively related. One of the most widely used definitions of job satisfaction originates from Locke (1976), who describes it as 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences' (p. 1304). Clearly, this definition shows some similarity with work engagement since both refer to a pleasant, positive and fulfilling psychological condition that is related to one's work. However, work engagement and job satisfaction differ regarding their levels of activation; whilst work engagement is associated with activation and arousal, job satisfaction is associated with de-activation and satiation (Salanova et al. 2014). A satisfied employee is calm and content, whereas an engaged employee is excited and enthusiastic. This interpretation agrees with the meta-analyses of Christian et al. (2011), who showed that work engagement explained incremental variance in task- and contextual performance after controlling for job satisfaction, organizational commitment, and job involvement. In another meta-analysis using 32 samples Newman et al. (2010) found that work engagement, as assessed with the UWES, correlated .49, with job satisfaction, and 54, and .46 with job involvement and organizational commitment, respectively. So it seems that, although work engagement and job satisfaction are moderately correlated, both concepts can be differentiated from each other whereby the former refers to a more active state than the latter (see also Bakker and Oerlemans 2011).

Only very few studies included work engagement and *life* satisfaction. For instance, using structural equation modeling, Shimazu and Schaufeli (2009) found that work engagement was stronger related to life satisfaction (r = .67) than to health (r = .45) and performance (r = .25). Furthermore, a three-wave longitudinal study showed that work engagement predicted life satisfaction, rather then the other way around (Hakanen and Schaufeli 2012).

Based on the previous results regarding work engagement it is expected that general engagement is moderately positively associated life satisfaction and positive affectivity, and negatively with negative affectivity. However, it is also expected that general engagement can be discriminated from both affectivity and life satisfaction.



Engagement and the Big Five Personality Traits

Various studies have been carried out on the relationship between work engagement and the Big Five personality characteristics; neuroticism, extraversion, conscientiousness, openness, and agreeableness (Goldberg 1990). No formal meta-analyses is available so far, but Schaufeli (2016) calculated sample-weighted mean correlations of eight studies that included personality and work engagement (except one all studies used the UWES). Correlations of work engagement with conscientiousness (.32) and extraversion (.29) are strongest, followed by neuroticism (-.27), openness (.27), and agreeableness (.17), respectively. Six studies regressed work engagement on the Big Five traits so that their unique contributions could be established (Kim et al. 2009; Inceoglu and Warr 2011; Joseph et al. 2011; Rossier et al. 2012; Zaidi et al. 2013; Akhtar et al. 2015). Although the results are somewhat mixed, there is evidence that *all* Big-five personality traits are related to work engagement. The strongest and most consistent findings were observed for conscientiousness and neuroticism, and the weakest and least consistent findings for agreeableness. Most studies also controlled for socio-demographics and some for additional job related variables.

In conclusion: work engagement is negatively associated with neuroticism, which makes sense because neuroticism refers to a predisposed vulnerability to experience *negative* psychological states. The positive association with extraversion and conscientiousness can be explained by the overlap that exists between the energy and persistence facets of both personality factors (Goldberg 1990) on the one hand, and of work engagement (particularly vigor) on the other hand. Engagement might be related to openness to experience because engaged employees are characterized by a promotion focus which means that they are open for opportunities to grow and to develop (Van Beek et al. 2013). Finally, although less convincingly demonstrated, the positive relationship of work engagement with agreeableness concurs with descriptions of engaged employees as being cooperative, caring and likeable.

Based on the overview above it is expected that general engagement is associated in a similar way as work engagement with the Big Five personality characteristics.

Method

Procedure and Sample

This paper uses data of the LISS (Longitudinal Internet Studies for the Social sciences) panel administered by CentERdata (Tilburg University, The Netherlands). The LISS-panel is a representative sample of Dutch individuals who participate in monthly Internet surveys. The panel is based on a true probability sample of households drawn from the population register (see www.lissadata.nl; Scherpenzeel and Das 2010). Surveys are fielded in the panel every month, covering a large variety of domains including work, education, income, housing, time use, political views, values, and personality. More specifically, the current study uses LISS-panel data that were collected in July 2013. The total sample (N = 3970) includes 47.2% men and 52.6% women and the mean age is 53.04 years (SD = 17.11); 46.7% is working, 25.4% is retired, 9.4 takes care of the household, 7.4% is studying, 3.4% is unemployed, 4% is work incapacitated, 2.8% is volunteering, and 0.9% cannot be classified; 35.7% has a low education (primary or lower vocational education), 33.6% has a medium education (high school or



intermediate vocational education), and 30.7% has a higher education (college or university); 24% is single.

Measures

Engagement General engagement was measured with reworded items from the short version of the Utrecht Work Engagement Scale (Schaufeli et al. 2006), whereby 'work' or 'job' was replaced by 'daily activities'. The resulting 9-item Utrecht General Engagement Scale (UGES) is included in the appendix. All non-working respondents filled out the UGES, whereas most employed respondents filled out the original 9-ittem UWES. A random sample of about 25% (n = 456) of the employed employees filled out the UGES instead of the UWES. This allows the UGES to be investigated in a working sample as well. In total 2571 respondents filled in the UGES, and 1399 the UWES; nobody filled out both scales simultaneously. All engagement items were scored on a 5-point rating scale (1 = `never', 5 = `always'). Internal consistencies (Cronbach's α) for the total UWES and UGES are .95 and .94, respectively.

Positive and negative affect was assessed with the Positive and Negative Affect Scale (PANAS; Watson et al. 1988) that consists of 10 positive (e.g., 'interested', 'excited') and 10 negative affects (e.g., 'distressed', 'irritable') that are scored on a 7-point rating scale (1 = 'not at all', 7 = 'extremely').

Satisfaction with Life Respondent's satisfaction with life as a whole was assessed with the Satisfaction with Life Scale (SWLS; Diener et al. 1985). An example item is: 'In most ways my life is close to my ideal'. All 5 items are scored on a 7-poit rating scale (1 = 'strongly disagree', 7 = 'strongly agree').

Personality traits were assed with the International Personality Item Pool (IPIP) Big Five factor markers (Goldberg 1992), which includes five subscales of 10 items each for Extraversion (e.g., 'feel comfortable around people'), Agreeableness (e.g., 'sympathize with other's feelings'), Conscientiousness (e.g., 'like order'), Openness (e.g., 'am full of ideas'), and Emotional Stability (e.g., 'worry about things' – reversed). The items are scored on a 5-point rating scale (1 = 'very inaccurate as a description of you', 5 = 'very accurate as a description of you').

Results

Table 1 displays the means, standard deviations, internal consistencies (Cronbach's α), and Pearson correlations between all study variables. Please note that the UWES was filled out exclusively by working respondents, whereas the UGES was filled out by non-working as well as by a random selection of 25% working respondents. As can be seen from Table 1, the pattern of correlations of both engagement inventories with the other study variables is highly similar with an average difference between r's of only .07. Both engagement inventories correlate highest (r's > .30) with positive affectivity (PANAS) and life satisfaction (SWLS). As expected, negative affectivity correlates *negatively* with all other variables, and particularly highly with emotional stability (r's > .40), whereas both PANAS scales are virtually unrelated (.03 < r's < .06).



Table 1 Means (M), standard deviations (SD), Pearson correlations, and internal consistencies (Cronbach's α on the diagonal) of the study variables; UWES above the diagonal (N = 2571)

Engagement-UGES 2.97 0.85 - .94 .95 .9		OGES		UWES		Correlation	_								
UWES 2.97 0.85		M	SD	\mathbb{Z}	SD	1	2	3	4	S	9	7	8	6	10
UWES 3.27 0.88 - 4.39 1.01 4.34 1.07 2.00 1.06 2.00 1.06 - 5.04 1.14 5.11 1.04 3.31 0.67 3.32 0.69 ss 3.87 0.50 3.81 0.53 sness 3.52 0.45 3.45 0.46	gagement-UGES	2.97	0.85	,	,	96.		,	,	,				,	
85 3.52 0.45 3.45 0.45 3.45 3.32 0.69 3.31 0.67 3.32 0.45 3.32 0.45 3.32 0.45 3.32 0.45 3.32 0.45 3.45 0.46	gagement-UWES	,	,	3.27	0.88	,	.95	.35***	18***	.32***	.27***	.22***	.23***	.14***	.32***
2.00 1.06 2.00 1.06 – 5.04 1.14 5.11 1.04 3.31 0.67 3.32 0.69 ss 3.87 0.50 3.81 0.53 sness 3.52 0.45 3.45 0.46	NAS-PA	4.39	1.01	4.34	1.07	.40***	,	.87	*90°	.23***	.32***	.22***	.23***	.18***	.21***
5.04 1.14 5.11 1.04 arsion 3.31 0.67 3.32 0.69 bleness 3.87 0.50 3.81 0.53 entiousness 3.52 0.45 3.45 0.46	NAS-NA	2.00	1.06	2.00	1.06	24***	,	.03	.93	34***	13***	10***	14***	20***	54***
axsion 3.31 0.67 3.32 0.69 bleness 3.87 0.50 3.81 0.53 entiousness 3.52 0.45 3.45 0.46	VLS	5.04	1.14	5.11	1.04	***	1	.26***	33***	68.	.22***	.14**	.15***	**80`	.42***
3.87 0.50 3.81 0.53 3.52 0.45 3.45 0.46	traversion	3.31	0.67	3.32	69.0	.29***	,	.30***	14***	.24***	.87	.36***	***60	.21***	.24***
3.52 0.45 3.45 0.46	reeableness	3.87	0.50	3.81	0.53	.21***	1	.23***	14***	.13***	.35***	.81	.21***	.20***	*90
	nscientiousness	3.52	0.45	3.45	0.46	.28***	,	.27***	17***	.16***	.10***	.22***	.78	.26***	.11***
0.50	enness	3.41	0.50	3.49	0.50	.26***	1	.21***	14**	***60	.35***	.24***	.24***	92.	.21***
0.70	tability	3.49	96.0	3.35	0.70	.22***		.22***	53***	****	.25***	****20.	.14**	.19***	88.

Note: *p < .05, **p < .01, ***p < .01



Factorial Validity

Confirmative Factor Analysis (CFA) with AMOS 21.0 (Arbuckle 2012) was used for testing the factorial validity of both engagement measures. Separate analyses were performed for the UGES (n = 2571) and the UWES (n = 1399). In both cases, the fit to the data of the one-factor model was compared with that of the correlated three-factor model (vigor, dedication, and absorption). Maximum likelihood estimation was employed and the goodness-of-fit of the tested models was evaluated using the χ^2 test statistic, the Normed Fit Index (NFI), the Tucker Lewis Index (TLI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Values larger than .90 for NFI, TLI and CFI, and .08 or lower for RMSEA indicate acceptable model fit (Byrne 2009).

As can be seen from Table 2, the fit of the original, one-factor model is not good for both engagement inventories, but it can be improved when two pairs of items are allowed to correlate (i.e., items 1–2, and items 8–9). The fit of the resulting, revised one-factor model is acceptable in both cases, with all fit statistics, except RMSEA, satisfying their criterion. Yet compared with the revised one-factor model the fit of the revised tree-factor model is superior for the UGES: $(\Delta \chi^2)_3 = 25.68$; p < .001) as well as the UWES $(\Delta \chi^2)_3 = 85.92$; p < .001). The fit of the three-factor model is good, except that the value of RMSEA exceeds the criterion of .08.

However, inspection of the correlations between the latent factors of the revised three-factor model reveals that they are very strongly related; for the UGES inter-correlations range between .95 and .99, and for the UWES between .93 and .96. This means that the three factors are virtually identical. Because of the very strong associations between the three subscales and because the fit of the revised one-factor model is sufficient a parsimonious, composite engagement score will be used in the remaining part of the current paper.

Relations with Socio-biographical Variables

Virtually no gender difference exists in levels of engagement. For the UWES the difference is non-significant ($F_{1,\ 1397}=3.58,\ n.s.$), whereas men (M=3.01) score slightly higher than women (M=2.92) on the UGES ($F_{1,\ 2569}=6.9,\ p<.01$). Although linear correlations of engagement with age are close to zero; r=.05 and r=-.05 for the UWES and the UGES, respectively, a curvilinear relationship is observed for the UGES. Younger as well as older respondents show *lower* scores on the UGES ($F_{2,\ 2568}=12.69;\ p<.001$), whereas an opposite – non-significant – trend is observed for the UWES; younger as well as older respondents score *higher* ($F_{2,\ 1396}=3.38;\ p=.09$). No difference in levels of engagement exists between

Table 2 Fit of the UGES and UWES

	Model	χ^2	df	NFI	TLI	CFI	RMSEA
UGES	One-factor	1605.31	27	.91	.88	.91	.15
	One-factor revised	692.02	25	.96	.95	.96	.10
	Three-factors	1139.48	24	.94	.91	.94	.13
	Three-factors revised	646.34	22	.96	.94	.97	.11
UWES	One-factor	1179.59	27	.89	.86	.89	.17
	One-factor revised	349.74	25	.97	.96	.97	.10
	Three-factors	671.86	24	.94	.91	.94	.14
	Three-factors revised	263.82	22	.98	.96	.98	.09

Note: for all χ^2 , p < .001



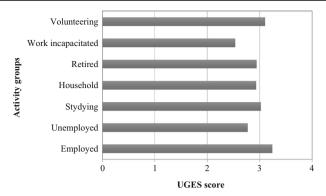


Fig. 1 Mean UGES scores for activity groups (n = 2571)

those with low, medium and high education for the UWES ($F_{2, 1391} = 2.13$; *n.s.*). However, those with a lower education (M = 2.90) score significantly lower on the UGES as compared to those with a medium (M = 3.00) and a higher education (M = 3.03) ($F_{2, 2561} = 5.73$; p < .01).

Finally, scores on the UGES differ systematically between activity groups ($F_{7, 2563} = 15.19$; p < .01). As can be seen from Fig. 1, those who are employed and do volunteer work have the highest levels of engagement, whereas those who are unemployed or work incapacitated have the lowest levels. Mean scores on the UGES for the employed are significantly higher than for all other groups, except the volunteers, whereas mean scores for those who are work incapacitated or unemployed are significantly lower compared to all other groups.

Relation with Affectivity

First, the fit to the data of the original model of the PANAS with a positive and a negative factor was tested in the entire sample (N = 3974). As can be seen from Table 3, the fit of this model is rather poor because the item 'excitement' is not suitable for the scale. Deleting this item and allowing the errors of 'nervous' and 'jittery' to correlate results in a revised model that fits satisfactory to the data. The positive affect (PA) and negative affect (NA) scales of the PANAS are virtually unrelated (r = -.06).

Secondly, the fit of a one-factor model was tested that assumes that all engagement and PANAS items load on *one* common 'general well-being' factor. However, it appeared that the fit of this model is very poor for the UGES as well as the UWES.

Finally, a model was tested with correlated engagement, and positive and negative affect factors. This three-factor model was tested separately for the UGES and the UWES. As can be

Table 3 Fit of PANAS (PA and NA) and engagement (UGES, UWES)

Model	χ^2	df	NFI	TLI	CFI	RMSEA
PANAS original (PA, NA)	6525.03	169	.86	.84	.86	.10
PANAS revised (PA, NA)	3707.18	150	.92	.91	.92	.08
One-factor (UGES + PANAS)	22,414.72	347	.52	.48	.52	.16
Three-factors (UGES, PANAS-PA, PANAS-NA)	3655.93	344	.92	.92	.93	.06
One-factor (UWES + PANAS)	15,266.95	347	.47	.43	.48	.18
Three-factors (UWES, PANAS-PA, PANAS-NA)	2502.19	344	.91	.92	.92	.07

Note: for all χ^2 , p < .001



Model	χ^2	df	NFI	TLI	CFI	RMSEA
One-factor (UGES + SWLS) Two-factors (UGES, SWLS) One-factor (UGES + SWLS) Two-factors (UGES, SWLS)	7141.17 971.20 4000.77 513.24	75 74 75 74	.73 .96 .74 .97	.68 .96 .69	.74 .97 .74 .97	.19 .07 .19

Table 4 Fit of SWLS and engagement (UGES, UWES)

Note: for all χ^2 , p < .001

seen from Table 3, the fit of both models is satisfactory. Inspection of the correlations reveals that engagement is weakly negatively related to negative affect (r = -.27 and -.20 for the UGES and the UWES, respectively) and moderately positively to positive affect (r = .45 and .37 for the UGES and the UWES, respectively). Again, positive and negative affectivity are virtually unrelated (r = -.09 and -.02 for the model with the UGES and the UWES, respectively).

Taken together, similar patterns are found for the UGES and the UWES in relation to the PANAS. Instead of loading on one general well-being factor, it appears that general engagement as well as work engagement can be differentiated from positive and negative affectivity.

Relation with Satisfaction with Life

Table 4 displays the results of the analyses of engagement and satisfaction with life, as assessed with the SWLS.

A one-factor model that assumes that all SWLS and engagement items load on a common, overall satisfaction factor shows a very poor fit to the data for the UGES as well as the UWES. In contrast, a two-factor model that differentiates between satisfaction with life (SWLS) and work (UWES)- or general (UGES) engagement shows a very good fit to the data. The engagement and satisfaction factors are low to moderately and positively related: r = .35 and .48 for the UWES and UGES, respectively.

Hence, it appears that instead of loading on one undifferentiated factor, engagement and satisfaction with life can be differentiated from each other, albeit that they are positively related.

Relation with Personality

Linear, stepwise multiple regression analyses were carried out to establish the unique contribution of each personality trait in explaining variance of work engagement and general engagement.

Table 5 shows that the Big Five personality characteristics explain slightly more variance in general engagement as compared to work engagement (23% vs. 18%). In both cases,

Table 5 Multiple regression of engagement (UGES, UWES) on Big Five personality factors

	UGES (β)	UWES (β)
Stability	.26***	.26***
Extraversion	.13***	.15***
Conscientiousness	.18***	.15***
Agreeableness	.08***	.12***
	.11***	-
Openness R ²	.23	.18

Note: *** p < .001



emotional stability contributes by far the most variance, followed by conscientiousness and extraversion. Agreeableness contributes least in both analyses, and openness only contributes in explaining general engagement. Taken together, the pattern of relations with personality characteristics is quite similar for both engagement questionnaires, except for openness.

Discussion

The current paper introduces the novel concept of general engagement by arguing that there is no compelling psychological reason to restrict engagement exclusively to the work domain. Why should only work be pursued with energy, dedication and focus, but not sports, leisure activities, or volunteering, or any other activity for that matter? For instance, fulfillment of basic psychological needs, which is a major driver of engagement, may just as well occur outside the work context. It is maintained that, like work engagement, general engagement is characterized by vigor, dedication and absorption, but unlike work engagement it is related to the performance of daily activities of any sort. In order to tap general, context-free engagement, a brief self-report questionnaire is proposed – dubbed Utrecht General Engagement Scale (UGES). To ensure equivalence with work engagement, the UGES (see Appendix) is based on rewording the Utrecht Work Engagement scale (Schaufeli et al. 2002a, b).

It appeared that the UGES is highly internally consistent, and although a CFA shows that the fit of the three-factor model (vigor, dedication, absorption) is slightly superior to that of the one-factor model, it was decided to accept the latter. The reason is that the three engagement dimensions are very highly correlated (r's \geq .95), sharing over 90% of their variances.. Hence, practically speaking the three dimensions are similar. It is important to note that similar high correlations between the three engagement dimensions of the UWES were found, not only in the current study but also in samples from 10 different countries (Schaufeli et al. 2006). Therefore it was recommended in this multi-nation study to use the total score as an indicator of work engagement, rather than computing separate scores for each of its three dimensions. This recommendation is also given for the UGES: a composite score is to be preferred. However, when a structural equation model is tested, rather than using arbitrary parcels of items it is recommended to use the three dimensions as indicators of the latent general engagement construct because this can be defended on conceptual grounds.

It appeared that females, younger and older persons, and those with lower education exhibit lower general engagement scores compared to males, middle aged, and higher educated persons, respectively. Although the differences are statistically significant because of the considerable statistical power that results from the large sample size, they are rather small and therefore hardly practically relevant. For instance, males score .09 points higher than females on a 5-point scale. However, meaningful differences in general engagement levels were observed between activity groups. Those who are employed and do volunteer work have relatively high general engagement scores, whereas those who are unemployed and work incapacitated exhibit low general engagement scores. This agrees with rather consistent findings that employed people are healthier than unemployed people and that volunteering has favorable psychological effects. For instance, in their meta-analysis Paul and Moser (2009) observed that the average number of persons with psychological problems (i.e. distress, depression, anxiety, psychosomatic symptoms, subjective unwell-being, or poor self esteem) among the unemployed is 34%, compared to 16% among employed individuals. In addition, another meta-analysis demonstrated that volunteering has favorable effects on depression, life



satisfaction, and wellbeing (but not on physical health) of those who volunteered (Jenkinson et al. 2013). Therefore it can be concluded that the results regarding general engagement are in line with other measures of psychological health and wellbeing, at least as far as the employed, the unemployed and volunteers are concerned. This adds to the construct validity of the UGES.

In order to establish its discriminant validity, relationships of the UGES with affectivity and satisfaction with life were studied. CFA-results indicate that positive and negative affectivity can be discriminated from general (and work) engagement. Tellingly, relations of (general and work) engagement are stronger with positive affectivity than with negative affectivity. This is in line with earlier findings that positive emotions seem to be less differentiated and than negative emotions, which are more specific (Watson and Clark 1997). This is also reflected in our language that contains more words for negative than for positive emotions (Baumeister et al. 2001). Most likely this predominance of negative over positive emotions has to do with the fact that negative emotions signify bad things and are therefore more important for our (evolutionary) survival than positive emotions that signify good things (Baumeister et al. 2001).

Although general engagement is moderately associated with satisfaction with life, CFA-results clearly show that the fit of the two-factor model with engagement and satisfaction as separate factors is superior to that of an undifferentiated one-factor model. In other words, when people are engaged in daily activities they tend to be satisfied with their lives (and vice versa), but yet being engaged cannot be reduced to merely feeling satisfied with one's life. Although satisfaction and engagement are both positive psychological states, the former is characterized by satiation and low arousal, whereas the latter is characterized by drive and high arousal (Salanova et al. 2014; Bakker and Oerlemans 2011). In other words the crucial difference between satisfaction and engagement is the level of arousal or drive, which might explain why engaged employees perform over and above satisfied employees (Christian et al. 2011). In conclusion and as expected, general engagement is moderately associated with affectivity and life satisfaction, but can nevertheless be distinguished from both constructs, hence confirming the discriminant validity of the UGES. Moreover, compared to work engagement, relations of general engagement with both constructs are somewhat stronger because they refer to the same, broader, context-free domain.

Finally the current study also investigated the relationships of engagement with the Big Five personality factors. Correlations of general and work engagement with these personality factors are in the same range as the sample-weighted correlations of the eight studies that were reported in the introduction: they varied between .20 and .30. The pattern of correlations of general engagement and work engagement with the five personality factors is highly similar with a mean difference of only .06 (range .01 to .12). Also the mean difference with the sample-weighted correlations is rather small: .03 for the UGES (range .00–.05) and .07 for the UWES (range .02–.13). More detailed analyses revealed that *all* personality factors explained a unique proportion of variance in UGES-scores, with – similar to the UWES (Inceoglu and Warr 2011; Kim et al. 2009; Akhtar et al. 2015) – emotional stability and conscientiousness contributing most. In the current study, virtually identical β-values for the personality factors were observed in case of the UWES (mean difference .02; range .00 to .04). Only openness did not explain a significant proportion of variance in work engagement sores.

In conclusion and despite the somewhat divergent finding regarding openness to experience, it can be concluded that, as expected, general engagement is associated in a similar way to the Big Five personality factors as work engagement. Like work engagement, the overlap of general engagement with personality factors is small – less than 10%.



Strength, Weaknesses and Suggestions for Future Research

The major strength of the current study is the large and representative sample of the Dutch speaking population that is permanently residing in the Netherlands. This means, for instance, that the mean and standard deviation of the UGES are reliable estimates of the population parameters. Therefore, cut-off values that correspond with 1 SD below or above the mean can be used to classify individuals as 'low' (the bottom 16%) or 'high' (the top 16%) in general engagement, respectively. More specifically, scores lower than 2.12 would indicate 'low' general engagement, whereas scores higher than 3.82 would indicate 'high' general engagement.

However, also some weaknesses have to be acknowledged. The first obvious weakness is the cross-sectional nature of the current study that precludes any causal inferences. This is not a serious weakness, though, because no causal relationships were assumed in the first place. Rather, it was expected that satisfaction and engagement are correlated and share the same antecedents and consequences (Christian et al. 2011; Macey and Schneider 2008). Furthermore, by definition affectivity and personality are stable dispositions that may influence engagement, whereas the revered is rather unlikely.

Second, no estimation was included of the correlation between general engagement and work engagement in the worker subsample. Future studies should focus on this association, not only because it permits an unambiguous assessment of the overlap of both constructs but also because it might explain unique variance in outcomes, over and above work engagement.

Third, Modification Indices have been used to allow errors to correlate in order to improve the fit of the CFA model that includes affectivity and engagement. Although this post-hoc optimization strategy is generally discouraged, it can be defended on substantive grounds, such as overlapping meaning or item content (MacCallum et al. 1992). This seems to be the case for the engagement items 1 and 2 (since both refer to feeling energetic, strong and vigorous) and items 8 and 9 (since both refer to being immersed and engrossed). In addition the NA items 'nervous' and 'jittery' are synonyms (e.g. both were identified as identical by the word processor that is used to write this paper).

Finally, the aim of the current paper was rather narrow; namely to show that the concept work engagement can be extended to daily activities. However in the next step, relationships with similar concepts with a different background may be investigated, notably harmonious passion (Vallerand et al. 2003) and flourishing (Seligman 2011). While passion is defined as a core feature of a person's *identity*, engagement is a positive experience that is related to some kind of activity. Seen from this perspective harmonious passion refers to a person's deeper core, whilst engagement refers to a person's instantaneous mood. A person might pursue his or her passion with energy, dedication and focus, yet the activity which provokes the experience of engagement is not necessarily a passion; that is, a constituting element of a person's identity. Birkeland and Buch (2015) found that harmonious passion was strongly related with work engagement, but that both constructs cannot be reduced to each other. Future research should establish that the same is true general engagement. In a similar vein, the relationship between general engagement and flourishing should be investigated. According the PERMA-theory flourishing – feeling good and functioning well in life – arises from five aspects of well-being: Positive emotions, Engagement, Relationships, Meaning, and Accomplishment. More specifically, engagement refers to a deep psychological connection to a particular activity and comes very close to flow (Csikszentmihalyi 1990), an optimal state of concentration on an intrinsically motivating task whereby awareness of time may fade. Although flow and engagement as measured with the UWES – are positively related they also differ. For instance, a study of



De Frage and Moneta (2016) showed that flow experiences moderated the impact of need satisfaction on work engagement; for those with more flow the impact was weaker. So rather than overlapping with work engagement, flow experiences seem to play an independent role. Future research should establish this for general engagement as well.

Final Remark

The current study demonstrates that the UGES is a reliable and valid indicator of general engagement that can be differentiated from positive and negative affectivity and satisfaction with life, and that shows weak and positive relationships with personality factors, especially with emotional stability and conscientiousness. Hence, the UGES is fit to be used in future research to study the novel phenomenon of general engagement.

Acknowledgements This research was funded by the Research Fund KU Leuven.

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References

- Akhtar, R., Boustani, L., Tsivrikos, D., & Chamarrro-Premuzic, T. (2015). The engageable personality: Personality and trait EI as predictors of work engagement. Personality and Individual Differences, 73, 44–49.
- Arbuckle, J. L. (2012). *IBM SPSS Amos 21 user's guide*. Crawfordville: Amos Development Corporation.
- Bakker, A. B., & Oerlemans, W. (2011). Subjective well-being in organizations. The Oxford handbook of positive organizational scholarship, 178–189.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, F., & Vohs, K. D. (2001). Bad is stronger than good. Review of General Psychology, 5, 323–370.
- Birkeland, I. K., & Buch, R. (2015). The dualistic model of passion for work: Discriminate and predictive validity with work engagement and workaholism. *Motivation and Emotion*, 39, 392–408.
- Bosman, J., Rothmann, S., & Buitendach, J. H. (2005). Job insecurity, burnout and work engagement: The impact of positive and negative affectivity. SA Journal of Industrial Psychology, 31, 48–56.
- Byrne, B. M. (2009). Structural Equation Modeling with AMOS (2nd ed.). Nahwah: Lawrence Erlbaum.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work Engagement: a quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64, 89–136.
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper Collins.
- De Bruin, G. P., & Henn, C. M. (2013). Dimensionality of the 9-item Utrecht Work Engagement Scale (UWES-9). Psychological Reports, 112, 788–799.
- De Frage, D., & Moneta, G. B. (2016). Flow at work as a moderator of the self-determination model of work enaggement. In L. Harmat, F. Ørsted, F. Ullén, & J. Wright (Eds.), *Flow experience* (pp. 105–123). Basel: Springer.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 319–338.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71–75.
- Goffman, E. (1959). The presentation of self in everyday life. New York: Doubleday Anchor.
- Goldberg, L. R. (1990). An alternative description of personality: The Big Five factor structure. *Journal of Personality and Social Psychology*, 59, 1215–1229.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. Psychological Assessment, 4, 26–42.
- Hakanen, J. J., & Schaufeli, W. B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. *Journal of Affective Disorders*, 141, 415–424.



- Inceoglu, I., & Warr, P. (2011). Personality and job engagement. Journal of Personnel Psychology, 10, 117–181.
- Jenkinson, C. E., Dickens, A. P., Jones, K., Thompson-Coon, J., Taylor, R. S., Rogers, M., Bambra, C. L., Lang, I., & Richards, S. H. (2013). Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers. *BMC Public Health*, 13, 773.
- Joseph, E. N., Luyten, P., Corveleyn, J., & De Witte, H. (2011). The relationship between personality, burnout, and engagement among the Indian clergy. The International Journal for the Psychology of Religion, 21, 267–288.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33, 692–724.
- Kim, J., Shin, K. H., & Swanger, N. (2009). Burnout and engagement: A comparative analysis using the Big Five personality dimensions. *International Journal of Hospitality Management*, 28, 96–104.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 1297–1349). Chicago: Rand McNally.
- MacCallum, R. C., Roznowski, M., & Necowitz, L. B. (1992). Model modification in covariance structure analysis: The problem of capitalization on chance. *Psychological Bulletin*, 111, 490–504.
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1, 3–30.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11–37.
- Newman, D. A., Joseph, D. L., & Hulin, C. J. (2010). Job attitudes and employee engagement: Considering the attitude "A-factor". In S. Albrecht (Ed.), *The handbook of employee engagement: Perspectives, issues, research, and practices* (pp. 43–61). Cheltenham: Edward-Elgar.
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: meta-analyses. *Journal of Vocational Behavior*, 74, 264–282.
- Rossier, J., Zecce, G., Stauffer, S. D., Maggiori, C., & Dauwaldeler, J.-P. (2012). Career Adapt-Abilities Scale in a French-speaking Swiss sample: Psychometric properties and relationships to personality and work engagement. *Journal of Vocational Behavior*, 80, 734–743.
- Salanova, M., del Libano, M., Llorens, S., & Schaufeli, W. B. (2014). Engaged, workaholic, burned-out or just 9-to-5? Toward a typology of employee well-being. *Stress and Health*, 30, 71–81.
- Schaufeli, W. B. (2012). The measurement of work engagement. In R. R. Sinclair, M. Wang, & L. E. Tetrick (Eds.), Research methods in occupational health psychology: Measurement, design, and data analysis (pp. 138–153). New York: Routledge.
- Schaufeli, W. B. (2016). Heavy work investment, personality and organizational climate. *Journal of Managerial Psychology*, 31, 1057–1073.
- Schaufeli, W. B., & Bakker, A. B. (2010). The conceptualization and measurement of work engagement. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). New York: Psychology Press.
- Schaufeli, W. B., Martinez, I., Marques Pinto, A., Salanova, M., & Bakker, A. B. (2002a). Burnout and engagement in university students: Across national study. *Journal of Cross-Cultural Psychology*, 33, 464–481.
- Schaufeli, W. B., Salanova, M., Bakker, A. B., & Gonzales-Roma, V. (2002b). The Measurement of Engagement and Burnout: A two sample confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3, 71–92.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. Educational and Psychological Measurement, 66, 701–716.
- Scherpenzeel, A. C., & Das, M. (2010). "True" longitudinal and probability-based internet panels: Evidence from the Netherlands. In M. Das, P. Ester, & L. Kaczmirek (Eds.), Social and Behavioral Research and the Internet: Advances in Applied Methods and Research Strategies (pp. 77–104). Boca Raton: Taylor & Francis.
- Seligman, M. E. P. (2011). Flourish: A visionary new understanding of happiness and well-being. New York: Free Press.
- Shimazu, A., & Schaufeli, W. B. (2009). Is workaholism good or bad for employee well-being? The distinctiveness of workaholism and work engagement among Japanese employees. *Industrial Health*, 47, 495–502.
- Sulea, C., Van Beek, I., Sarbescu, P., Virga, D., & Schaufeli, W. B. (2015). Engagement, boredom, and burnout among students: Basic need satisfaction matters more than personality traits. *Learning and Individual Differences*, 42, 132–138.
- Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Leonard, M., & Marsolais, J. (2003). Les passions de l'ame: on obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85, 756–767.
- Van Beek, I., Taris, T., Schaufeli, W. B., & Brenninkmeijer, V. (2013). The motivational make-up of heavy work investment. *Journal of Managerial Psychology*, 29, 46–62.



Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: the role of basic psychological need satisfaction. Work and Stress, 22, 277–294.

- Viljevac, A., Cooper-Thomas, H. D., & Saks, A. M. (2012). An investigation into the validity of two measures of work engagement. The International Journal of Human Resource Management, 23, 3692–3709.
- Watson, D., & Clark, L. A. (1997). Measurement and mismeasurement of mood: Recurrent and emergent issues. Journal of Personality Assessment, 68, 267–296.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Zaidi, N. R., Waijid, R. A., Zaidi, F. B., Xaidi, G. B., & Zaidi, M. T. (2013). The big five personality traits and their relationships with work engagement among public sector university teachers of Lahore. *African Journal of Business Management*, 7, 1344–1353.

