# THE DAY RECONSTRUCTION METHOD Applications in organizations

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Happiness is commonly measured using single direct questions such as "Taking all together, how happy would you say you are these days? Please indicate with a number between 0 and 10, where 0 stand for completely unhappy and 10 for complete ly happy". Questions of this kind are also used for measuring satisfaction in particular life-domains, such as satisfaction with one's job. This method assumes that people can adequately retrieve how satisfied they have been over periods such as 'these days'.

Nobel laureate Daniel Kahneman is skeptical about that assumption and presented evidence for several biases in the reminiscence process, such as desirability distortion and the 'peak-end effect'. For that reason Kahneman prefers assessment of satisfaction using experience sampling method (ESM). In this technique respondents rate repeatedly how satisfied they feel at the moment, for instance in reaction to SMS messages on their mobile telephone at random moment during the day. The average of momentary satisfaction ratings during a certain period is typically somewhat lower than global estimates are and Kahneman considers the former to be less biased than the latter.

Experience sampling is costly however and for that reason this method is not well applicable in large scale survey studies. Therefore Kahneman proposed another method, which also capitalizes on recent experience. This is a dairy method, in which people first list their activities of the previous day and next rate how they have felt during each of these. This is called the "Day Reconstruction Method" abbreviated as DRM. The first version was a paper and pencil questionnaire, which was not too easy to handle. Meanwhile an internet application has become available, which is part of the HappinessIndicator website at <a href="http://happinessindicator.com">http://happinessindicator.com</a>. The Happiness Indicator is an English language version of the Dutch 'GeluksWijzer' (www.gelukswijzer.nl), which is a joint project of Erasmus university Rotterdam and VGZ health insurance company in the Netherlands, that is online since 2010 and has attracted some 70.000 participants since.

#### Web based happiness diary

Respondents first list their activities of the previous day, beginning with when they wake up in the morning and ending when they went to sleep. Activities of at least half an hour are selected. A screenshot of a typical day of an academic is presented on <u>figure 1</u>.

Next the program lists these activities, and presents a rating scale on the right side. Using these scales respondents rate how happy they have felt during each of the activities. An example is presented on <u>figure 2</u>, again a typical academic who enjoys his working hours more than any other activity.

When these entries have been made, the program then provides feedback. First it generates a satisfaction profile, which provides the respondent with an overview of the activities during which he or she felt best. The case of the above academic is presented on figure 3. Next the program shows how comparable people have felt during similar activities. See the example on figure 4.

The happiness diary can be used on a continuous basis. Respondents indicate how often they want to complete it, default is once a month. Periodically they receive an e-mail with an invitation and a link to the webpage on which they can log in.

#### Application in individual search for a happier life

This happiness diary is one of the ' tools for working on ones happiness' on the happiness indicator website.

The profile on <u>figure 3</u> provides first of all a more systematic view on one's experience. This profile can differ from what one thinks one likes the most. For instance the academic at hand here can think that he likes the company with his wife most, while he actually feels best when behind his desk alone.

The comparison on figure 4 informs the respondent on whether a more satisfying use of time is possible, for instance if your average happiness score during working hours is 6, while the average among other people like you is 8, 8 is apparently possible for people like you, and you may be in the wrong job. In the example on <u>figure 4</u> we see little differences, probably because this Beta version has been used only by a few academics as yet.

### Application in organizations: better measurement of job satisfaction

Though designed for use by individuals in the first place the happiness diary can also be used for organizational purposes. One of the applications is better measurement of job satisfaction.

Job satisfaction is commonly measured using global self estimates such as mentioned in the introduction of this article. Next to the inaccuracies noted by Kahneman this involves a more fundamental problem. Ratings of satisfaction with life domains are heavily influenced by general life-satisfaction, which is known as the top-down effect. So happy workers will report high satisfaction with their job, even if work conditions are actually poor, while unhappy workers will report dissatisfaction with work even though work conditions are pretty good. As a result the organization does not know whether to invest in better work conditions or not.

This problem can be avoided using the happiness diary. Since respondents note both how they feel during work and non-work activities, the difference between these can be computed. Trait unhappy people will feel miserable both at work and at home, but when working conditions are good they may feel better at work. Likewise happy people who report high job satisfaction, may actually feel less happy at work than in their private hours.

Data obtained with the Dutch version of this happiness diary suggest that working people feel typically somewhat less well during working hours than during non-work activities and the difference is about one point on this 0 to 10 scale. A negative difference greater than one point can be taken as an indication that working conditions fall short.

Next to the better measurement of average job-satisfaction, the dairy method provides information about satisfaction with particular working activities. The longitudinal design enables follow-up over time and the web methodology enables such follow-up at low cost.

### Figure 1 Happiness diary: listing of activities in the previous day

L	escribe wha	t you did ye	esterday.							
	Time Time activity activity started ended		Activity		Where		With whom		Subactivities	
1	. 7:30 •		Getting up		Home	•	My partner	•		
2	7:30 •	8:00 •	Exercising	•	Elsewhere	•	Alone	•	Going for a walk Cycling Playing sports Other	
3	8:00 •	8:30 •	Eating	•	Home		My partner	•	Breakfast   Lunch   Dinner   Snack   Other	
4	8:30 •	9:30 •	In transit	•	Elsewhere	•	Alone	•	By foot   By bicycle   By moped   By car   By public transport   Other	
5	9:30 •	12:30 -	Working	•	Work	•	Colleagues	•	Paid Unpaid   Formal communication   Informal communication   Taking a break	
6	12:30 •	13:30 •	Eating	•	Work		Colleagues	•	Breakfast Lunch   Dinner   Snack   Other	
7	13:30 •	17:30 •	Working	•	Work	•	Clients	•	Paid   Unpaid   Formal communication   Informal communication   Taking a break.	
8	17:30 •	18:30 -	In transit		Elsewhere		Alone	•	By foot   By bicycle   By moped   By car   By public transport   Other	
9	. 18:30 -	19:00 •	Eating	•	Home	•	My partner	•	Breakfast   Lunch   Dinner   Snack   Other	
1	0. 19:00 •	22:00 -	Studying	•	Home	•	Alone	•	Course of study   Workshop or training course   Homework   Independent study   Other	
1	1. 22:00 •	23:00 •	Relaxing	٠	Home	•	My partner	•	Hobby   Computer   Reading   Watching TV   Listening to music   Talking   Playing   Other	
			C	Add an activit	y	C	Delete last activit	ty	$\supset$	

## Figure 2

Happiness diary: rating of how happy one has felt during each of the activities

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		in and you reer	during cach activity.											U	
		Time	Activity	0	1	2	3	4	5	6	7	8	9	10	
			Getting up												
	1.	-07:30	With whom: My partner Where: Home	٥	0	0	0	0	•	0	0	0	0	0	
	2.	07:30-08:00	Exercising Cycling With whom: Alone Where: Elsewhere	0	0	0	0	0	0	•	0	0	0	0	
	3,	08:00-08:30	Eating Breakfast With whom: My partner Where: Home	0	0	e	e	ø	o	0		0	0	0	
	4.	08:30-09:30	In transit By car With whom: Alone Where: Elsewhere	o	0	ø	0	0	e	•	o	0	0	o	
	5.	09:30-12:30	Working Paid, Informal communication With whom: Colleagues Where: Work	0	0	0	0	0	0	0	0	0	•	0	
	6.	12:30-13:30	Eating Lunch With whom: Colleagues Where: Work	0	0	0	ø	0	0	0	ø		0	0	
	7.	13:30-17:30	Working Paid, Formal communication With whom: Clients	•	0	0	0	0	0	0	0	0	•	0	

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### Figure 3 Happiness diary: feedback on personal satisfaction profile

### Figure 4 Happiness diary: feedback by comparison with other people

