

# CAPTURING THE MOMENT IN THE WORKPLACE: TWO METHODS TO STUDY MOMENTARY SUBJECTIVE WELL-BEING

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Employees may experience all kinds of emotional ups and downs during a regular workday. Consider a woman in a traffic jam on her way to work. She may be annoyed because of it. Yet, later at work, she may experience enthusiasm as a result of the positive feedback she receives from her boss. After work, she may spend the evening with friends, watch TV, exercise, or instead continue to work because of a deadline that is due the next morning. Importantly, everyday changes in momentary affective experiences at work and elsewhere appear to affect important outcomes, including job satisfaction (Judge & Ilies, 2004), employee well-being (Demerouti, Bakker, Geurts, & Taris, 2009; Fuller et al., 2003; Gross, Meier, & Semmer, 2013), organizational citizenship behavior (Dalal, Lam, Weiss, Welch, & Hulin, 2009), and job performance (Bakker & Oerlemans, 2011; Beal, Weiss, Barros, & MacDermid, 2005; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009).

In the current chapter, we will describe two research methods – the Experience Sampling Method (ESM) and the Day Reconstruction Method (DRM) – that organizational psychologists can use to capture the momentary affective experiences of individuals in reaction to their everyday

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working life. We will argue that these momentary affective experiences are important in advancing knowledge and practice within the field of organizational psychology, especially in terms of employee well-being and employee performance. Moreover, we describe the practical challenges involved in conducting empirical studies based on an ESM or DRM design.

## STUDYING MOMENTARY SUBJECTIVE WELL-BEING

Subjective Well-Being (SWB) refers to how a person evaluates his or her life (Diener, Sandvik, & Pavot, 1991). This appraisal may take the form of cognitions – when a person makes a conscious evaluative judgment about his or her satisfaction with (working) life; or take the form of affect, when people experience negative or positive emotions in response to everyday life. In this chapter, we concentrate on the latter form of SWB – momentary affective experiences (Russell, 1980, 2003) in everyday working life, which we also refer to as momentary SWB.

The momentary SWB of employees has a considerable impact on both personal and organizational outcomes (e.g., Ilies, Schwind, & Heller, 2007), which we will discuss below. However, first, we address the question what kind of methodologies we can use as organizational psychologists to accurately capture and study (changes in) momentary affective experiences in the everyday lives of employees, as well as their consequences. Momentary affective experiences are usually organized around specific episodes that occur in people's everyday life. For instance, it is well known that autobiographical memory is structured hierarchically, with specific events nested within broader episodes (Conway & Pleydell-Pierce, 2000). Thus, when individuals are asked to describe a recent workday that is still fresh in their memory, it is likely that they will describe their day by “reconstructing” their daily events, behaviors, and affective states into meaningful episodes that happened in a “natural” chronological order. For example, as an academic, you may remember getting up, having breakfast, and commuting to work. After getting into the office, you started off by answering e-mails from students and colleagues, after which you attended the weekly meeting of your research group. Thereafter, you had lunch with your colleagues and in the afternoon you continued working on a paper. At the end of your workday, you commuted back home, prepared a meal, ate

dinner (perhaps together with your family), and spent the evening by doing some household chores and watching TV before going to bed.

The boundaries between episodes appear to be important in terms of the consolidation and encoding of our affective experiences into our memory (Kurby & Zacks, 2008). Thus, at the end of a specific episode, individuals update their memory in terms of activities, social interactions, or other objects that were present during a particular episode (Beal & Weiss, 2013; Swallow, Zacks, & Abrams, 2009). In other words, the time at the end of an episode and the start time of the next episode represent an important moment where people actually evaluate and decide what to take away from their experience.

Based on this knowledge, we argue that there are at least two fruitful ways for organizational psychologists to (re)capture the flow of episodes and momentary SWB as experienced during the workday: the ESM (Csikszentmihalyi, Larson, & Prescott, 1977), which asks individuals to report on their SWB “in the moment”; and the DRM (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004), where individuals report on their momentary SWB after chronologically reconstructing the various episodes of the preceding day.

### *Experience Sampling Method*

ESM refers to a method of data collection in which participants respond to repeated signals over the course of time, while functioning within their natural setting (Scollon, Kim-Prieto, & Diener, 2009). Although ESM as a method is not new (Brandstaetter, 1983; Csikszentmihalyi et al., 1977), recent technological advances have facilitated the use of ESM as a research technique. Today, handheld devices (e.g., personal digital assistants (PDAs), or smartphones) can be preprogrammed to signal employees at various moments, asking them to report on their affective experiences “in the moment.” In addition, the software in handheld devices allows for a direct transfer to statistical software packages for immediate analysis. Also, the software may enable participants to receive personalized feedback on their handheld devices, depending on the way in which they respond to the questions asked.

There are various ways in which ESM may be used (Reis & Gable, 2000; Wheeler & Reis, 1991). First, “interval contingent sampling” refers to data collection in which participants complete self-reports after a designated

interval for a preset time period (e.g., hourly reports, daily reports). Second, “event-contingent sampling” occurs when participants complete self-reports when a predesignated event occurs (e.g., reporting after every social interaction; Cote & Moskowitz, 1998). Third, “signal-contingent sampling” refers to participants responding to various questions (e.g., affective states) when prompted by a randomly timed signal. Of course, the kind of ESM technique that is used depends on the research questions under study.

When studying intra-individual changes in SWB, it is important to ask employees not only about their momentary affective states, but also about the elements in the environment (e.g., quality and quantity of activities, events, interpersonal interactions, and so on) that may affect employees’ affective experiences. In this sense, Stone, Shiffman, and DeVries (1999) have coined the term “Ecological Momentary Assessment” (EMA) to study both affective experiences *as well as* elements in the environment potentially related to those momentary affective experiences with the ESM.

#### *Day Reconstruction Method*

An alternative and less intrusive way to capture momentary emotional states is the DRM (Kahneman et al., 2004). Kahneman and his colleagues argued that by carefully reconstructing one’s day into episodes, individuals are able to call upon their episodic memory to accurately remember their affective experiences during each episode. To this end, the DRM asks individuals to reconstruct in chronological order all episodes of the day. A particular episode is operationalized by the time an activity began and ended, the domain where such an activity took place (e.g., at home or at work), and also social interactions that may have occurred during such episodes. After carefully reconstructing all episodes of a particular day, participants are asked to indicate their affective experiences for each episode. Affective experiences may contain a range of positive and/or negative affective states like feelings of happiness, excitement, satisfaction, stress, anger, fatigue, or depression.

As alluded to before, people appear to encode and store their affective experiences into their memory when one episode ends and another episode starts (Kurby & Zacks, 2008). The DRM therefore facilitates access to encoded affective experiences by asking individuals about specific episodes – including begin and end times – that occurred during the preceding day. The DRM is susceptible to recall bias, as it uses chronological reconstruction to recall into memory the momentary SWB during episodes that occurred

during the previous day. To investigate the accuracy of affective experiences as reported with the DRM, Dockray et al. (2010) compared an ESM with a DRM during similar time points of the day. In this study, 94 women aged 21–54 years completed an ESM and DRM diary for two days. Via ESM, the participants reported on their “current” feelings during six fixed time points (after getting up, at 10:00, 12:00, 15:00, 17:00, and before going to bed) on a scale from 1 (not at all) to 5 (very much). Feelings analyzed were happy, tired, stressed, frustrated, and angry. Note that only happiness was considered as a positive emotional state whereas all other states investigated were negative. At the end of a 24-hour cycle, participants completed a DRM diary, where they were asked to reconstruct all episodes of the last 24 hours. Each episode was defined in terms of onset and duration, location, social situation, and activity. After reconstructing their day, participants were asked to report on the same positive and negative states as reported in the ESM. The affective states as reported with the ESM during particular hours of the day were then compared to the affective states as reported with the DRM on the same hours of the day. Dockray and colleagues concluded that, after adjustment for attenuation, the mean correlations between affective states reported with ESM and DRM ranged from .58 to .78 on workdays, and from .67 to .90 on nonwork days. Interestingly, momentary happiness showed the highest between-method correlation, ranging from .71 on a workday to .90 on nonwork days. Although the overlap between ESM versus DRM is not perfect, it shows that the DRM is able to (re)capture fluctuations in momentary affective states to a reasonable extent. In addition, the DRM provides rich information on the actual episodes that occur in the everyday life of individuals.

## **CAUSES AND CONSEQUENCES OF MOMENTARY SWB**

Why should organizational psychologists be interested in studying momentary SWB? We argue that there are at least four reasons for doing so. First, a growing body of research shows that the level of SWB fluctuates significantly on a within-person level. For example, Bakker, Oerlemans, Demerouti, and Sonnentag (2013) used a DRM design to study intra-individual, daily fluctuations in SWB (i.e., happiness, vigor, state of being recovered) among 85 employees over the course of nine workdays. Interestingly, results showed that 59% of the variance in happiness,

66% of the variance in vigor, and 88% of the variance in recovery before sleep (i.e., a combination of feeling relaxed and recovered) could be attributed to fluctuations on a within-person and day level. Another example is the ESM study of [Ilies and Judge \(2002\)](#), where 27 employees completed momentary job satisfaction measures at four different times during the day for a period of four weeks, resulting in a total of 1907 observations. Results showed that the within-individual variance for daily job satisfaction was 36%.

Second, fluctuations in momentary SWB can be attributed to very specific events, activities, social interactions, or other “momentary” indicators that vary within individuals, on a day-to-day basis. For instance, the DRM study of [Bakker et al. \(2013\)](#) showed that continuing work-related activities during off-job time at night had a negative effect on daily happiness, whereas engaging in exercise had a positive effect on daily SWB (i.e., happiness, vigor, and recovery before sleep). In a similar vein, [Dimotakis, Scott, and Koopman \(2010\)](#) followed 60 full-time employees over the course of 10 workdays with an ESM. The participants completed measures of interpersonal interaction characteristics and affective states at three randomly signaled hours within three two-hour time blocks (9:30–11:30 am; 12:00–2:00 pm; and 2:30–4:30 pm), as well as a measure of job satisfaction at the end of each workday. Dimotakis and his colleagues showed that momentary positive interactions in the workplace had a positive effect on daily positive affect at work, whereas momentary negative interactions in the workplace were positively related to daily negative affect at work.

Intra-individual changes in SWB have also been linked to *time-based variations*. For example, some studies have indicated that people experience greater pleasant affect later in the day versus in the morning, and on weekends versus on workdays (e.g., [Dockray et al., 2010](#); [Egloff, Tausch, Kohlmann, & Krohne, 1995](#); [Larsen & Kasimatis, 1990](#)). Moreover, intra-individual changes in momentary SWB also depend on *physiological changes within individuals* across time. For example, using ESM, [Ilies, Dimotakis, and Watson \(2010\)](#) followed 67 employees over 10 working days by signaling people four times a day to fill out their positive affect and negative affect while simultaneously monitoring employees’ blood pressure and heart rate levels. The results showed – among other things – that momentary experienced negative affect within employees related significantly to momentary blood pressure. In addition, both momentary positive and negative affects related significantly and positively to momentary elevations in heart rate.

A third reason why organizational psychologists should be interested in momentary SWB is that fluctuations in momentary SWB predict important personal and organizational outcomes. For example, [Dimotakis et al. \(2010\)](#) showed in their study that the direct effects of positive and negative daily workplace interactions on daily job satisfaction were mediated by the positive and negative affective states that people experienced that day in the workplace. Thus, momentary fluctuations in affective states can explain why daily interactions at work affect daily job satisfaction. Moreover, following 42 employees over the course of five consecutive workdays with a diary booklet, [Xanthopoulou et al. \(2009\)](#) showed that daily fluctuations in employee work engagement (i.e., a positive affective/motivational state that is characterized by vigor, dedication, and absorption) predicted daily financial returns in fast food restaurants. Specifically, on days where employees experienced more work engagement (i.e., beyond their general level of work engagement), financial returns were significantly higher compared to days where employees felt less engaged. Another example is the study of [Binnewies, Sonnentag, and Mojza \(2009\)](#), where 92 employees from public service organizations were followed over the course of one workweek. On pocket computers, employees answered two daily surveys (before work and after work). Results showed that the momentary state of being recovered in the morning (i.e., feeling physically and mentally refreshed and energetic) was a significant predictor of daily task performance.

Fourth and finally, individual differences *between* employees can affect the way in which daily, or even momentary events, activities, and social interactions at work have an impact on momentary SWB and its consequences on the intra-individual level (*within* employees). In [Bakker et al.'s \(2013\)](#) DRM study, employees also filled out a questionnaire assessing their enduring level of workaholism (i.e., a strong inner drive to work excessively hard; [Taris, Schaufeli, & Verhoeven, 2005](#)). Results revealed that spending time on daily work-related activities during nonwork hours at night had a stronger negative relationship with daily SWB (i.e., happiness, vigor, recovery) for employees who scored high (vs. low) on workaholism. In contrast, spending more time on daily physical activities had a more positive impact on daily SWB for employees who scored high (vs. low) on workaholism. These findings imply that particularly workaholics experience negative consequences from working during nonwork time, and instead benefit more from other activities after work such as physical exercise. One other example from outside the organizational research domain is the study of [Oerlemans, Bakker, and Veenhoven \(2011\)](#) who used the DRM to follow 438 retired elderly across 16 days. In addition to the DRM, participants also

filled out a personality questionnaire (the Ten Item Personality Index (TIPI); Gosling, Rentfrow, & Swann, 2003). The findings demonstrated that elderly who were high on extraversion experienced more happiness when engaging in social activities compared to individuals who scored low on extraversion. In addition, highly extraverted individuals spent more of their daytime on social activities. Thus, it seems useful to combine research methods that can assess between-person differences (i.e., in enduring SWB, or trait personality) with ESM or DRM to better understand how within-person processes may work out differently across time depending on more stable characteristics that vary between persons.

In sum, based on the above findings, we argue that the ESM and the DRM (or similar diary methods) are useful tools for organizational psychologists that help to shed light on intra-individual changes in SWB, as well as their causes and consequences.

## ESM OR DRM

Organizational psychologists should be aware of the pros and cons when considering to perform a study based on either an ESM or a DRM. We therefore discuss some of the most important considerations in this section.

### *Labor Intensive*

One major consideration is that both methods are rather labor intensive for the participants. Consider that a typical ESM study lasts about one to two weeks. During that time, participants are signaled multiple times a day at which they have to fill out various questions on a handheld device. Let's consider a study where employees have to answer 10 questions for five times a day. The total number of questions to be answered over a two-week time period would then be 700 ( $10 \times 5 \times 14$ ). Even when participants are able to respond quickly to the ESM signal – for instance answering all the questions in two minutes – it will take participants about 140 minutes ( $2 \times 5 \times 14$ ) to answer all questions. With the DRM, participants are usually approached only once per day. However, participants first have to reconstruct the episodes (e.g., in terms of activities, social interactions, and affective experiences) of the preceding (or previous) day in chronological order, and then indicate their affective experiences during each reported episode. Depending on the exact number of activities and affective experiences

reported, it may take participants about 15 minutes per day to fill out a diary based on the DRM. Then, the total time involved when using a DRM design for two weeks would be about 210 minutes ( $15 \times 14$ ). Note, however, that shorter time periods may also suffice and thus reduce the total number of questions asked, and the time needed to fill out each questionnaire.

### *Disruptive Nature*

A second consideration relates to the disruptive nature of ESM versus DRM in the daily life of participants. When using the ESM, participants respond to an automated signal which is in most cases a beeping sound. This alarm disrupts one's activities and conversations at work, and may annoy participants and others who are present when the signal beeps. There may also be instances where respondents are not likely to reply to the ESM signal, or during which it is impossible to do so. For example, at meetings, the signal can be considered disruptive and the device is likely to be turned off. Moreover, when working in a high volume setting (e.g., industrial workers in factories), beeping sounds may not be heard by all of the participants, although vibrating devices or visual signals could circumvent this problem. Also, participating in an ESM study could be outright dangerous for some groups of employees, for instance, when driving a truck or when working as an air traffic controller. When using a DRM, participants have more autonomy to decide a time and a place that suit them most during which they can fill out their diary. This prevents most of the annoyances involved in having to respond to automated signals right away as with ESM.

### *"Real Time" versus "Recalled" Affective Experiences*

A third consideration involves the time lag involved in capturing momentary affective experiences. An advantage ESM has over DRM is that it can assess true "in vivo" behavior and emotional experiences of employees multiple times during the day, with hardly any time lag. Instead, the DRM uses episodic recall to assess affective experiences. However, it appears that the DRM captures affective experiences rather well as compared to the ESM method (Dockray et al., 2010). Moreover, one important advantage of the DRM is that participants reconstruct all of their activities, social interactions, and affective experiences of the day. This might be

advantageous over using an ESM, as researchers can get a full overview on what kind of episodes have unfolded in chronological order, as well as affective experiences of employees during each episode.

### *Group Size*

There appear to be differences in the sample size when comparing ESM to DRM based studies. ESM studies typically involve only small sample sizes of about 20 to 100 employees (e.g., Bono, Foldes, Vinson, & Muros, 2007; Fullagar & Kelloway, 2010; Ilies, & Judge, 2002). Compared to ESM, DRM studies appear to have attracted somewhat larger groups of participants. For example, Kahneman et al. (2004) included 909 employed women over the course of one workday; Oerlemans et al. (2011) were able to include 438 retired seniors who reconstructed one day per month for over two years. Finally, Knabe, Rätzel, Schöb, and Weimann (2010) included 171 employed and 177 unemployed individuals using a combination of DRM and survey methods. Group size may be important depending on the type of research questions. Consider that as organizational psychologists, we would like to examine differences in the daily within-person fluctuations in job satisfaction of employees working in two different organizations. It would be important to include a large sample of employees of both organizations to accurately answer this research question. A small subsample of motivated and conscientious employees from both organizations would not be enough, although the fine-grained within-person fluctuations can still be analyzed with small group sizes.

## **CHALLENGES INVOLVED IN MOTIVATING PARTICIPANTS**

How can we motivate employees to participate in either ESM or DRM studies? One classic way to motivate individuals to participate in such lengthier studies is to *offer money* or *gifts*. Monetary incentives have been shown to significantly improve compliance (Lynn, 2001). However, we should be cautious when deciding on the amount of compensation. Stone, Kessler, and Haythornwaite (1991) reported that an incentive of \$250 resulted in overall poor quality of data, showing that more money may not always result in data that is better usable.

A second way to motivate participants is to *develop innovative designs* that are (more) attractive and intuitive for participants. For instance, at the Erasmus University in Rotterdam, we initiated a research project called “Happiness Indicator” (in Dutch: Gelukswijzer), which includes a “Happiness diary” that is based on a DRM design. Going beyond traditional paper-and-pencil questionnaires, we have developed a web-based DRM diary that individuals fill out online. In the online happiness diary, participants reflect on their preceding day by reconstructing in chronological order from half hour to half hour their activities and social interactions from the time they got up until the time they went to bed. To facilitate data collection, participants are presented with a visual timeline and a predefined activity bar to report their time spent on each of their activities during the preceding day (see Fig. 1). Upon completion of the timeline, participants are presented a second screen to report on their happiness during each of the reported activities (see Fig. 2). Since its launch in 2010, the Happiness Indicator has attracted over 40,000 participants, who together reported well over 200,000 episodes and happiness scores.

One example of an attractive design to acquire data on a large scale with an ESM is the “track your happiness” research project initiated by Matt Killingsworth at Harvard University ([www.trackyourhappiness.org](http://www.trackyourhappiness.org)). Participants can download an iPhone application after first responding to a survey that includes questions about sociodemographic background.

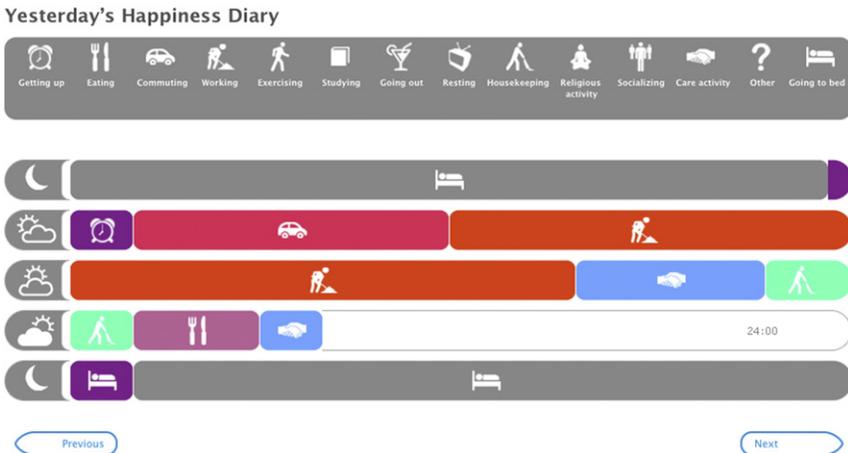


Fig. 1. Yesterday's Happiness Diary: A DRM-Based Diary Used in the Happiness Indicator Project – Showing Main Activity Category Bar and Timeline.

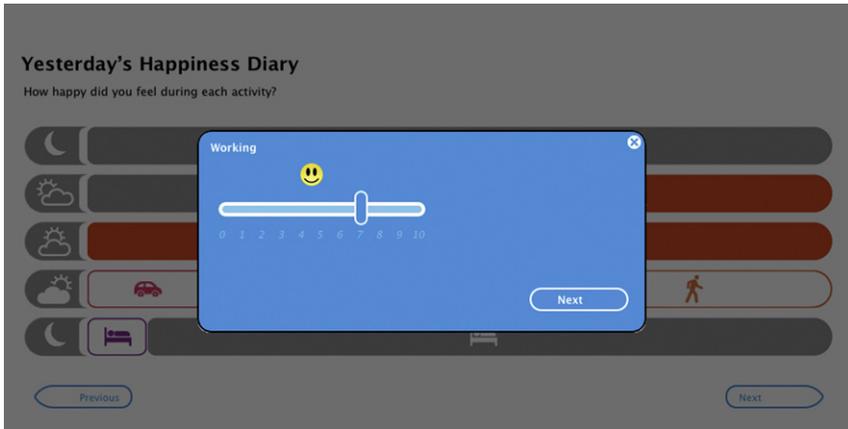


Fig. 2. Yesterday's Happiness Diary: A DRM-Based Diary Used in the Happiness Indicator Project – Showing Happiness Scale per Activity Type.

Next, participants can indicate how many times they want to be notified during the day. Each notification involves questions about how people are feeling, where they are, and what kind of activity they are doing. Whereas this is no different from any other ESM approach, the iPhone application makes it very easy for participants to fill out all of the questions asked. At the start of 2011, the database already included 5,000 people reporting on close to 250,000 activities and momentary affective experiences (see Killingsworth & Gilbert, 2010).

A third way of motivating employees to participate is by *including online feedback*. For instance, Bakker and colleagues have developed Internet applications – based on the Job Demands–Resources Model (e.g., Bakker & Demerouti, 2007) called the “Job Demands–Resources Monitor” and the “Engagement App.” Employees who fill in an online questionnaire receive personalized feedback on their computer or smartphone about their most important job demands and resources. For example, the feedback includes histograms of the specific demands and resources identified as important for work engagement, and participants’ scores are compared with a benchmark (comparison group). In addition, the feedback mode is interactive, such that participants can click on the histograms and receive written feedback about the meaning of their scores on the demands and resources. In a similar way, feedback about work engagement has been included in these web-based tools. The PDF report that can be generated after filling out the Job

Demands–Resources Monitor can be used as input for interviews with human resources managers and personal coaches – to discuss how personal working conditions can be optimized. In this way, it becomes more beneficial for employees to participate in studies. Also, the feedback itself may be used to optimize the working environment.

The Happiness Indicator we have developed at the Erasmus University in Rotterdam, as well as the “track your happiness” project initiated by Matt Killingsworth also include various personal feedback modules. In both projects, participants receive personalized feedback on how their happiness varies, depending on what they do, where they are, time of day, and various other factors that are collected with either the DRM or ESM. Moreover, in the Happiness Indicator, participants can also compare their happiness during activities with other participants who have similar backgrounds (e.g., in terms of age, gender, educational level, and marital status), using a dynamic benchmark. The website also includes survey questions about enduring work-related well-being, personality, and monthly happiness. When filling out personality and enduring work-related well-being questionnaires, individual scores of participants are compared with scores of a representative national (Dutch) sample. Standard deviations (SD) of the national sample are used to provide participants with feedback on their individual score. For example, the individual score could be very low ( $-2$  SD), low ( $-1$  SD), normal (mean), high ( $+1$  SD), or very high ( $+2$  SD) as compared with the national sample. Based on this comparison, participants receive personalized and automated feedback in the form of histograms and text messages.

Importantly, personalized feedback may also be an effective starting point for intervention studies, aimed at developing, embedding, and sustaining positive work-related well-being and behavior in organizational settings (e.g., Bakker, Oerlemans, & Ten Brummelhuis, *in press*).

## **ANALYZING ESM AND DRM DATA WITH HIERARCHICAL LINEAR MODELING**

How should organizational psychologists analyze the data that have been collected with the ESM or DRM? Importantly, data based on the DRM and ESM are by definition hierarchically structured; activities or experiences are nested within specific days, and days are nested within persons (e.g., Larson & Delespaul, 1992). Therefore, it is important to use

statistical software such as Hierarchical Linear Modeling (HLM) that can handle nested data. There are various reasons for doing so.

First of all, HLM tends to handle missing data rather well (for details, read [Snijders & Bosker, 1999](#)), which is especially important in follow-up research where some participants are likely to fail to respond to some of the signals (ESM) or sometimes forget to reconstruct their day (DRM). Second, HLM can model time. This is important, as we know that momentary affective experiences are (also) dependent on time. For instance, people usually experience more positive affective states at the end of the day as compared to the beginning of the day ([Rusting & Larsen, 1998](#)). Moreover, people appear to experience higher positive affective states during the weekend (i.e., the so-called “weekend peak effect”) and during off-job time compared to workdays ([Egloff et al., 1995](#)). Moreover, momentary affective states experienced during a previous moment or activity are likely to spill over to the next moment or activity ([Larsen, 1987](#)). HLM can take into account both time variables and lagged effects of affective states experienced during previous moments.

Third, HLM takes the dependency of the hierarchical structure of the ESM or DRM data into account ([Reis & Gable, 2000](#)). Put differently, ordinary multiple regression analysis is based on the assumption of independent observations. However, as events are nested within persons, and persons are nested within groups (e.g., organizations), there is a clear hierarchical structure that violates this assumption. HLM analysis takes such dependencies into account. Fourth, the technique allows the simultaneous estimation of within-person and between-person effects, and possible “cross-level” interactions between variables on each of the two levels ([Reis & Gable, 2000](#)). This makes it possible to analyze whether episodes on the event-level are experienced differently, depending on factors that reside at the between-person level. For example, in the DRM study of [Bakker et al. \(2013\)](#), HLM analyses were used to examine the cross-level interaction effect of a variable that resides on the between-person level (i.e., workaholism) on the within-person relationship between the daily time spent on off-job activities and daily SWB.

Various software programs are capable of handling nested data. For instance, SPSS 16.0 and higher (now PASW Statistics) is capable of handling HLM analyses. Another popular HLM software program is called Multi Level for Windows (MLWin; [Rasbash, Browne, Healy, Cameron, & Charlton, 2000](#)). In addition, software programs such as Mplus ([Muthén & Muthén, 1998](#)) are capable of performing HLM analyses. One advantage of

Mplus is that it also produces model fit indices that are commonly reported in Structural Equation Modeling (SEM).

## CONCLUSION

This chapter outlined two research methods – the Experience Sampling Method (ESM) and the Day Reconstruction Method (DRM) – as useful tools for organizational psychologists to study changes in momentary SWB in everyday working life. We showed that momentary affective states fluctuate significantly within persons, depending on the chronological flow of events and social interactions people experience during the days. In turn, fluctuations in momentary affective experiences are predictive of important personal and organizational outcomes, including daily SWB and daily performance. We wrote this chapter to inspire organizational psychologists to start using ESM and DRM next to more traditional research methods. It is fascinating that both methods provide a very realistic picture (or better: a movie) of how people experience and react to real-life situations. It is our hope that organizational psychologists will use ESM and DRM methods in order to better understand which kind of psychological processes help individuals to become happier and more productive in their everyday work lives.

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