The Creative Self in Context: Experience Sampling and the Ecology of Everyday Creativity

Paul J. Silvia, Katherine N. Cotter, Alexander P. Christensen

University of North Carolina at Greensboro, Greensboro, NC, United States

As this book shows, the concept of a *creative self* lends itself to many lenses. In this chapter, we'll view it through an old lens: the sense of self and identity developed by Allport (1937, 1961), the great personality theorist. Allport's view of selfhood has useful lessons for studying the creative self. He developed a view of people as essentially unique and idiosyncratic, defined largely by personal goals, who were embedded in environments that they typically select and influence. Allport thus sought to emphasize aspects of personality and motivation that are unique and to complicate the seemingly simple distinction between *person* and *environment* (Fleeson, 2004).

This chapter takes an Allportian perspective on everyday creativity—the often humble creative goals people pursue in their normal environments. We propose that *ecological momentary assessment* (EMA) methods, an innovation not available in Allport's time, offer a powerful framework for studying the creative self in context (Bolger, Davis, & Rafaeli, 2003; Conner, Tennen, Fleeson, & Barrett, 2009). By repeatedly assessing people as they go about their normal activities in their typical environments, researchers can illuminate variability in people's actions and environments, examine why a person's thoughts and actions are so variable across a day and week, and discern aspects of environments that shape people's actions.

For creativity researchers, the ability to study creativity naturalistical-ly—people working on their own creative goals at the times and places of their choosing—will offer new insights into what creativity looks like in the real world. After describing the notion of everyday creativity that guides this work, we will review some issues in EMA research and con-sider its benefits for creativity research. We will then review a small group of studies that have applied EMA methods—particularly experience sam-pling studies—to understand creativity in natural environments.

NOTIONS OF EVERYDAY CREATIVITY

The notion of creativity in everyday life appears in many concep-tions of creativity. The best known comes from the common distinction between Big-C Creativity and little-c creativity. Although coarse, this distinction has been fruitful in clarifying what creativity researchers are interested in. Many approaches to creativity, for example, are pri-marily interested in Big-C creativity, the study of domain-changing innovations and accomplishments (e.g., Gardner, 1993; Sawyer, 2006). Other approaches, in contrast, are more interested in little-c creativity, the study of how less eminent people come up with new ideas and pursue creative goals (e.g., Finke, Ward, & Smith, 1992; Weisberg, 2006).

The Four C Model (Kaufman & Beghetto, 2009) offers a useful concep-tion of humble, everyday forms of creativity. This model clarifies the tradi-tional distinction between Big-C and little-c creativity and expands to four Cs: *mini-c*, *little-c*, *Pro-c*, and *Big-C*. *Mini-c creativity*, the first c, is the "nov-el and personally meaningful interpretation of experiences, actions, and events" (Beghetto & Kaufman, 2007, p. 73). Often, everyday creative acts are small adjustments to routine, mundane activities rather than activities done with the intent to be creative. When people have ideas and insights that are "new for them," we see mini-c creativity: coming up with a varia-tion on a recipe, realizing a new route to work, discovering a well-known principle, or construing a problem in a new way. Variation in everyday experiences diversifies opportunities to engage in and apply different per-spectives. Mini-c creativity thus emphasizes interpretive and transforma-tive aspects of thought. Unlike the other C's, it focuses on cognitive acts more than tangible, observable creative products. Nevertheless, the many daily sparks of mini-c creativity are the breeding ground for more public and eminent forms of creativity.

Little-c creativity, viewed within the Four C Model, represents observ-able creative actions and products, what Kaufman and Beghetto (2009) call "everyday innovation" (p. 2). This category contains most of the cre-ative goals and pursuits of hobbyists, amateurs, children, and emerging

experts: writing songs, inventing new recipes, drawing and sketching, writing poems, learning an instrument, and decorating one's bedroom. Little-c creativity can be striking, but it isn't at the professional level captured by Pro-c and Big-C creativity. Perhaps the most striking thing about little-c creativity is its ubiquity: creative hobbies are widespread among people who don't aspire to a creative profession.

The common nature of creative goals and hobbies is emphasized in Richards' (2007, 2010) model of *everyday creativity*. Richards points out that the ubiquity of creative goals in everyday life says something significant about human nature. People develop and gain meaning from creative expression in their daily lives: they make time for it when they could be doing a million other things. The notion of everyday creativity seems to cover both mini-c and little-c creativity, and it emphasizes the functional role of creativity in human development. Richards suggests that creativity is both a cause and an effect of human flourishing. Doing creative activities increases well-being, and flourishing people naturally seek creative outlets. Creative actions in daily life are thus a cause and a sign of well-being.

Aesthetics research, a close cousin of creativity research, has also emphasized creative acts in everyday life, albeit from a different perspective. Whitfield and de Destefani (2011) advocated for studying what they called *mundane aesthetics*, the artistic and design choices people make in their daily lives. Just as creativity research has focused on eminent Big-C creators, aesthetics research has focused on how people think about and experience landmark works of fine art (Fayn & Silvia, 2015; Silvia, 2012). But most of the aesthetic choices people make are ecological, such as how people make decisions about their hair, clothes, watches, jewelry, furnishings, and wall colors (Whitfield & de Destefani, 2011). These aesthetic choices seem small, but the consequences are important for the people involved. The psychological reasoning involved seems complex, resembling the mini-c and little-c processes identified in the Four C Model (Kaufman & Beghetto, 2009). In short, the mundane aesthetics perspective emphasizes that people make countless creative decisions in crafting how they and others express themselves and experience their environments.

We'll use the term *everyday creativity* to encapsulate all these approaches, both because it is simple and because we find Richards' (2007) emphasis on the functional and motivational aspects of creativity compelling. In our sense of the term, everyday creativity captures the many expressions of creativity that people show in their natural environments, from inner ideas and insights to observable actions. These events might lead to major creative breakthroughs, but they typically don't and aren't important for that reason. Instead, we think that people's humble creative goals are important for their own sake. People invest so much time in creative hobbies that it says something significant about human nature—we are intrinsically creative.

HOW CAN WE STUDY EVERYDAY CREATIVITY?

How can everyday creativity be studied? Ordinary creative actions haven't attracted much attention thus far, but creativity researchers have developed some useful assessment methods. One straightforward approach asks people to rate their involvement in common creative activities. For example, the Biographical Inventory of Creative Behaviors (BICB), developed by Batey (2007), lists 34 different examples of common creative hobbies from a wide range of domains, such as writing a short story, drawing a cartoon, acting, coaching, and cooking. People are asked to indicate whether they have done a behavior in the past year, and they indicate *yes* (1) or *no* (0) to each item. The BICB yields a "creative behaviors" score, which is simply the sum of *yes* responses. The BICB is a popular scale and appears to work well (Silvia, Wigert, Reiter-Palmon, & Kaufman, 2012). The Creative Behavior Inventory (CBI; Hocevar, 1979) asks people to rate how often they have engaged in common creative actions; a popular revised version (Dollinger, 2003) focuses on arts and crafts domains. People rate how often they did each creative item on a 4-point scale, ranging from *Never Did This* to *More Than 5 Times*; the scale yields an overall score. Like the BICB, the CBI has good psychometric properties (Silvia et al., 2012).

Scales such as the BICB and CBI have their virtues, but one weakness is their inadvertent emphasis on breadth. People get high scores by endorsing more activities. The scales thus give higher scores to people who do creative acts in many different domains. Many people, however, have deep instead of broad creative interests. They might be intensively consumed with learning the ukulele, cooking, scrapbooking, or writing, to the exclusion of other creative domains. Even if they spend much of their free time on such creative pursuits, people with only a couple of major creative passions will receive lower scores than people who dabble superficially in many different domains. A second, smaller weakness is the content coverage. People's creative interests can be quirky and idiosyncratic, like people themselves (Allport, 1962), so many creative passions won't be captured by scales that list traditional creative domains.

Another approach, developed by Wolfradt and Pretz (2001), more effectively captures the quirky aspects of people's creative goals. In their project, participants were asked to list their personal hobbies. The hobbies were then rated by judges for their creativity. Some hobbies involved observing (e.g., watching movies or sports) or participating (e.g., reading, playing sports); others involved actively generating new things and ideas. Many of the most creative hobbies will be idiosyncratic, so asking participants to describe their own hobbies is more likely to capture them than standard activity lists.

What these approaches share, however, is an emphasis on stable aspects of people. The participants reflect on their typical or past behaviors and then provide information. The overall scale scores thus reflect typical features of the participants. This is a standard and useful approach for scaling individual differences, of course, but one thing such an approach does poorly is capture contextual variability. When is a person more likely to work on something creative? What contexts evoke and foster creativity? What explains variability in a person's creative motivation across a typical day or week? Understanding things that are variable and contextual requires a different assessment approach—usually known as *EMA* or *experience sampling*—the topic we turn to next.

ECOLOGICAL MOMENTARY ASSESSMENT

The Basic Worldview

EMA is an approach to measurement. It has a long history (see Hektner, Schmidt, & Csikszentmihalyi, 2007) but has caught fire in past couple of decades, largely because of technological and statistical innovations that make EMA research more convenient and accessible. The basic idea behind EMA is to assess the construct of interest repeatedly in people's naturalistic environments. Instead of dragging people into the dusty basement lab and measuring something once, an EMA researcher would assess people frequently while they went about their normal activities in their typical environments.

EMA research can assess anything. Self-report items are by far the most popular, but the method encompasses everything. Popular examples are measuring movement with accelerometers, physiological activity with portable cardiac monitors, ambient light and volume with sensors, the physical environment with small automated cameras, and conversations with clip-on microphones. Our focus, however, is questionnaire methods, which repeatedly present self-report items.

EMA is rooted in some general assumptions about assessment. First, people generally have no idea what they typically do. If you ask people in a lab to describe what they typically eat, how many hours a week they study for classes, their typical mood, or how much TV they watch, they will always give you an answer. But that answer will, at best, be loosely coupled to what really happens. EMA researchers emphasize that people don't encode, attend to, monitor, or count much of what they do in everyday life. When asked questions about their typical experiences and behaviors, then, people will rely on memory and decision heuristics, such as how quickly salient examples come to mind or their beliefs about the kind of person they are. EMA research seeks to get close to the construct by

assessing it as it happens. This reduces the influence of memory and motivational processes that plague cross sectional lab research (Schwarz, 2012).

Second, a person's actions and experience can be highly variable, and this variability is interesting in its own right (Fleeson, 2004). Assessing variability requires many measurement occasions—thus the emphasis on *repeated* assessment in EMA research. For example, people in a lab study can report how many hours they usually sleep per night and how well they typically sleep. But if these people then complete daily sleep diaries for 30 days, enormous within-person variability will appear. Many people will have little variability: from night to night, their sleep is consistent. Others will have some variability, and still others will have volatile patterns of sleep from night to night. Such findings are fascinating. What is the difference between people with consistent sleep and those with volatile sleep? And what explains within-person, day-to-day variability in sleep? What happened on days that were followed by good sleep versus poor sleep (e.g., Flueckiger, Lieb, Meyer, Witthauer, & Mata, 2016)? Likewise, within a day, people's moods can be highly variable, and this variability is predictable from what they are doing and what is happening in the environment. People lack insight into the many subtle correlations between changes in the environment and changes in their thoughts and feelings, so only research that repeatedly assesses both can illuminate subtle effects of context. For example, experience sampling research reveals a diurnal trend in positive moods (Watson, 2000) and finds that most people report feeling happier when other people are around (Burgin et al., 2012), but we doubt that many participants are aware of these influences.

Third, environments themselves are diverse and systematic. They are diverse because people are embedded in such different places during the day. It boggles the mind, really, to consider the range of environments that a large sample of adults might inhabit in a typical week. And the environments are systematic because they reflect, in large part, the influence of the people in them. As Allport (1961) argued, people approach and avoid particular environments, and their personalities and actions in turn shape the environment. For occupations, for example, Holland (1997) proposed that workers and workplaces have the same personality structure because the personality of a workplace environment reflects the personalities of the people who chose to inhabit it. Only by repeatedly assessing people during their normal days can researchers describe people's environments and unravel how aspects of the context influence what people think and do.

Common EMA Designs

The use of EMA designs allows researchers to capture a variety of experiences and can increase the external validity of the research. Traditionally, internal validity has been psychology's primary concern, but EMA

research trades the controlled environment of the lab for the complexity and realism of the everyday situations people find themselves in. Through this switch, EMA research can study the same constructs as lab research but with an emphasis on how they organically occur and vary.

Most EMA research uses one of three common designs. *Daily diary studies* assess people once per day, usually at the end. A weakness of this approach is that people must retrospectively reconstruct their day, and many notable events might be obscured. But this is offset by important strengths. Because the burden on participants is fairly low, researchers can ask a lot of items each day and collect daily reports for a long time, from a couple of weeks to many months.

Experience sampling studies, in contrast, randomly signal people within the day and ask a small set of questions at each signal. People are commonly asked about what they are thinking and doing at the moment of the signal, or what has happened since the last signal (e.g., if they smoked or ate). Experience sampling gets as close to the activity as possible, minimizing recall biases, and it samples enough of the day to afford measuring variability in experiences. A downside is the burden on participants, who are ceaselessly interrupted in the service of science. As the number of beeps per day increases, researchers must ask fewer items and reduce the number of participation days. A daily diary study can go on for months, but an experience sampling study is rarely more than 14 days.

Most experience sampling studies use random signals to sample the behavior. By randomly sampling pieces of the day, researchers can form a snapshot of what someone is actually doing and thinking. A variation is to use an *event-contingent design*. For example, people can be asked to fill out a short survey whenever a predefined event occurs. Event-contingent sampling works best when the event is unambiguous, fairly frequent, and typical for all participants, such as when measuring smoking among participants looking to quit, eating and snacking throughout a day, and social interactions. They are less apt for rare events. For example, some people rarely get chills and goose bumps from music (Nusbaum & Silvia, 2011, 2014), so they would have no data in a study that asked people to fill out a survey whenever they got chills (Nusbaum et al., 2014).

Researchers interested in EMA work will need to befriend multilevel models. Because of the repeated assessments, a study can have several levels of nesting, such as responses to items nested within days, and days nested within participants. The longitudinal quality of the data may also be relevant, such as within-day or within-week trends. Finally, participants usually ignore at least some of the signals or miss some diary days, and the analytic issues raised by complex patterns of missingness can be vexing (Silvia, Kwapil, Eddington, & Brown, 2013; Silvia, Kwapil, Walsh, & Myin-Germeys, 2014a).

THE CREATIVE SELF IN EVERYDAY ENVIRONMENTS

With the basics of EMA methods as a backdrop, this section illustrates some applications of experience sampling methods to the study of the ecology of everyday creativity. Not much research has been done, to be sure, but the handful of studies demonstrates the power of examining everyday creativity in real-world environments. Experience sampling methods are enormously revealing. In the studies we review in the subsequent text, we will both describe some interesting findings and hold up the studies as examples of the kinds of questions that experience sampling allows creativity researchers to ask.

Architecture Students' Flow Experience During Studio Work

Creativity research has a long interest in flow states, which have complex links to feelings of inspiration and creative motivation (Csikszentmihalyi, 1990). The original writings on flow emphasize that it is a state that is closely tied to environments, and early experience sampling work emerged from the study of flow (Csikszentmihalyi, 1975). Since then, however, much of the work on flow has taken a static, cross-sectional view, emphasizing individual differences in proneness to flow. In an illuminating study, Fullagar and Kelloway (2009) examined variability in the experience of flow in a sample of 40 architecture students. They were sampled in an architecture student's natural habitat: the studio. During the course of a semester, the students were randomly signaled during independent studio time to complete questionnaires about their flow experience and emotions while working on their projects. The 40 students provided 1000 responses, an illustration of the massive amount of data that even a small sample can provide.

The intraclass correlation (ICC) is a simple but revealing descriptive statistic in experience sampling studies. Because an outcome is measured repeatedly, the scores vary between people (some people tend to give higher flow ratings overall) and within people (a given person will give higher ratings at some times and lower ratings at others). In this case, the ICC for flow is the proportion of variance in momentary flow experience that is at the between-person level (variation between the participants) versus the within-person level (variation across time points). The ICC for flow was 0.26, so 74% of the variance in flow states during studio time was due to things that varied across studio days. Stated differently, 26% of the variance was associated with differences between people—contextual variation had a much larger influence. Flow thus behaved much more like state concept than a trait concept. This finding nicely demonstrates the wide variability within people that is revealed by intensive assessment (Fleeson, 2004). The essentially situational character of flow during

architecture studio work raises interesting questions about the within-person factors that cause variability in flow states from one point to the next.

Everyday Creativity in Daily Life

Another project examined how often a broad sample of undergraduates engaged in creative actions during a typical day (Silvia et al., 2014b). A final sample of 76 people was signaled 8 times a day for 7 days. The participants were college students, and around one-quarter of them were majoring in the arts. They were signaled by survey software that delivered the items by calling their cell phone (Burgin, Silvia, Eddington, & Kwapil, 2013). At each signal, people were asked whether they were doing something creative (scored simply *No* or *Yes*) and asked to rate their emotional states. The sample completed more than 2300 experience sampling surveys.

This design allowed us to describe what creativity looks like in the daily lives of college students. For example, how often do people engage in creative activities? People said *yes* to the item "Are you doing something creative?" roughly 22% of the time, so creativity was a common part of the participants' days. A natural question, then, is what was different between the times people said they were and they weren't doing something creative? We had measured a wide range of emotions (e.g., *happy*, *sad*, *active*, *anxious*, *angry*), so we examined whether people reported different emotional states when doing something creative. Only two states—feeling *happy* and *active*—differed between times when people were doing creative versus noncreative activities. Notably, these two active-positive states consistently appear in experimental work on mood and creativity (Baas, De Dreu, & Nijstad, 2008). No effects appeared for negative items, such as *anxious*, *angry*, *sad*, *self-conscious*, or *discouraged*, consistent with Richards' (2007, 2010) view of everyday creativity as a cause and consequence of well-being and inconsistent with old stereotypes about suffering and creativity (Silvia & Kaufman, 2010).

Another natural question concerns between-person differences. The overall figure of 22% conceals differences between people, so who was more likely to spend time on creative activities? We measured personality traits before the EMA part of the study, and it was no surprise to find that openness to experience strongly predicted the likelihood that people were doing something creative (McCrae, 1987; Nusbaum & Silvia, In Press). As Fig. 15.1 shows, people near the floor of openness had only a 12% probability of doing something creative, but people near the ceiling had a 40% probability.

This study is a good example of how experience sampling can be used to descriptively characterize a construct. Creativity was fairly common in the everyday lives of our participants, creative times of a
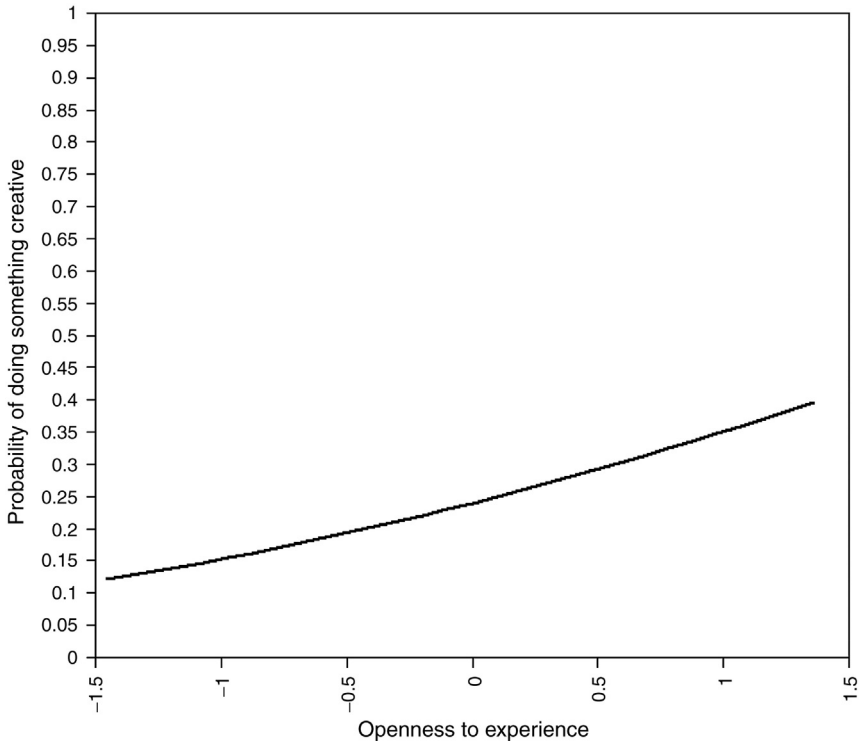
FIGURE 15.1   How openness to experience predicts the probability of "doing some-thing creative" during a typical day. *Source: Reprinted with permission from Silvia, P. J., Beaty, R. E., Nusbaum, E. C., Eddington, K. M., Levin-Aspenson, H., & Kwapil, T. R. (2014). Everyday creativity in daily life: an experience-sampling study of "little c" creativity.* Psychology of Aesthet-ics, Creativity, and the Arts, 8, 186.

day were more likely to be positive and active emotionally, and people high in openness to experience were more likely to choose to spend their time on creative projects. In addition, the picture of everyday cre-ativity that emerges offers unique support for the large cross-sectional lab literatures on creativity, mood, and personality: the basic ideas from those literatures are consistent with ecological observations of naturalistic creativity.

What Are Creative Days Like?

Days are another level of analysis. As noted earlier, daily diary studies allow researchers to ask many more questions and to collect data for more days. For creativity research, an interesting question is what "creative days"—days when people devote much of their time to creative pursuits—
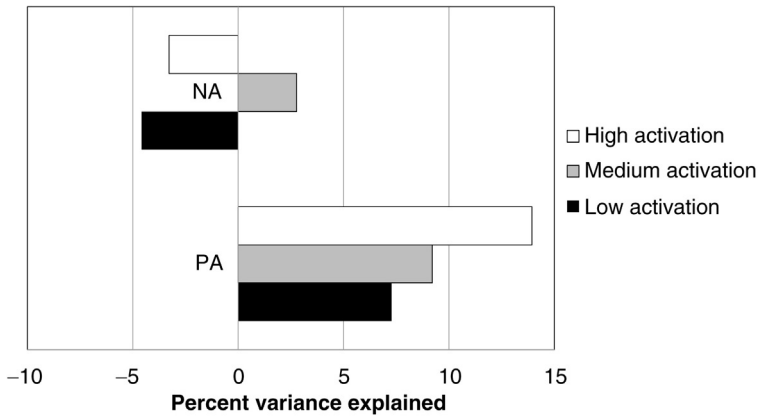
FIGURE 15.2 **The within-person relationship between daily positive affect (PA) and negative affect (NA) and daily creativity.** *Note*: The values are the percent of variance that the PA and NA predictors explained in daily creativity. The sign indicates whether the relationship was positive or negative in direction. *Source: Adapted from data in Conner, T. S., & Silvia, P. J. (2015). Creative days: a daily diary study of emotion, personality, and everyday creativity. Psychology of Aesthetics, Creativity, and the Arts, 9, 467, Table 2.*

are like. In a recent study (Conner & Silvia, 2015), 658 New Zealand college students took part in a 13-day daily diary study that, among many other things, asked "Overall, how creative were you today?" People rated their daily creativity along with a comprehensive set of emotion items, which were crafted to capture both positive and negative valences and high and low activation levels (Watson, 2000).

Daily creativity was associated with daily emotions in interesting ways. As Fig. 15.2 shows, daily positive affective states explained much more variance in daily creativity than daily negative states did. And the largest effect was for high-activation positive emotions (e.g., the items *energetic*, *enthusiastic*, and *excited*), which parallels the finding that within-day creativity was most strongly predicted by feeling happy and active (Silvia et al., 2014b).

The daily diary study included measures of personality traits. As before, openness to experience strongly predicted the typical levels of daily creativity: people high in openness reported days that were more creative across the 2 weeks. Intriguingly, openness to experience and daily positive affect also interacted. The relationship between daily positive affect and daily creativity became increasingly strong as openness to experience increased. Stated differently, daily positive affect and creativity were much more strongly correlated for high-openness people than for low-openness people. It is difficult to disentangle this intriguing effect: people high in openness might get a larger mood boost from creative work, feeling happy

might motivate open people to start doing something creative, or openness might affect third variables that cause positive affect and creativity to covary. But regardless, the finding again supports Richards' (2007) view of everyday creativity as a component of well-being rather than an outlet for anguish and suffering.

CONCLUSIONS

The psychology of aesthetics, creativity, and the arts has a long history of studying experience and activity in natural environments, such as museums, classrooms, rehearsal and performance spaces, and workplaces, to name a few. In this chapter, we sought to develop this ecological approach to the issue of creative selves. As Allport (1961) argued, the self is essentially idiosyncratic: people have a wide range of guiding values and personal goals that direct their everyday activity. And this activity takes place in contexts that people often choose and shape.

Psychology does not handle the unique, as well as it handles the general, as Allport (1962) often remarked, but EMA methods move us closer to the vision that Allport had for studying people. They respect the diversity of people's activities and contexts, and they seek to capture the variety and complexity of psychological processes in the real environments in which they happen. We think that EMA approaches will be enormously fruitful for understanding everyday creativity, the often humble creative activities people do in everyday life. Because people don't usually keep track of what they do or appreciate how aspects of their situations affect what they do, intensive sampling methods can illuminate what everyday creativity looks like in the real world and the kinds of environments that foster and sustain it.

Acknowledgments

References

Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Holt, Rinehart, & Winston.
Allport, G. W. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart, & Winston.
Allport, G. W. (1962). The general and the unique in psychological science. *Journal of Personality*, *30*, 405–422.

Baas, M., De Dreu, C. K. W., & Nijstad, B. A. (2008). A meta-analysis of 25 years of mood-creativity research: hedonic tone, activation, or regulatory focus? *Psychological Bulletin, 134*, 779–806.

Batey, M. (2007). *A psychometric investigation of everyday creativity*. London: University College. Unpublished doctoral dissertation.

Beghetto, R. A., & Kaufman, J. C. (2007). Toward a broader conception of creativity: a case for "mini-c" creativity. *Psychology of Aesthetics, Creativity, and the Arts, 1*, 73–79.

Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: capturing life as it is lived. *Annual Review of Psychology, 54*, 579–616.

Burgin, C. J., Brown, L. H., Royal, A., Silvia, P. J., Barrantes-Vidal, N., & Kwapil, T. R. (2012). Being with others and feeling happy: emotional expressivity in everyday life. *Personality and Individual Differences, 53*(3), 185–190.

Burgin, C. J., Silvia, P. J., Eddington, K. M., & Kwapil, T. R. (2013). Palm or cell? Comparing personal digital assistants and cell phones for experience sampling research. *Social Science Computer Review, 31*, 244–251.

Conner, T. S., & Silvia, P. J. (2015). Creative days: a daily diary study of emotion, personality, and everyday creativity. *Psychology of Aesthetics, Creativity, and the Arts, 9*, 463–470.

Conner, T. S., Tennen, H., Fleeson, W., & Barrett, L. F. (2009). Experience sampling methods: a modern idiographic approach to personality research. *Social and Personality Psychology Compass, 3*, 292–313.

Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety: The experience of play in work and games*. San Francisco, CA: Jossey-Bass.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.

Dollinger, S. J. (2003). Need for uniqueness, need for cognition, and creativity. *Journal of Creative Behavior, 37*, 99–116.

Fayn, K., & Silvia, P. J. (2015). States, people, and contexts: Three psychological challenges for the neuroscience of aesthetics. In J. P. Huston, M. Nadal, F. Mora, L. F. Agnati, & C. J. Cela-Conde (Eds.), *Arts, aesthetics, and the brain* (pp. 40–56). New York: Oxford University Press.

Finke, R. A., Ward, T. B., & Smith, S. M. (1992). *Creative cognition: Theory, research, and applications*. Cambridge, MA: MIT Press.

Fleeson, W. (2004). Moving personality beyond the person-situation debate: the challenge and the opportunity of within-person variability. *Current Directions in Psychological Science, 13*, 83–87.

Flueckiger, L., Lieb, R., Meyer, A. H., Witthauer, C., & Mata, J. (2016). The importance of physical activity and sleep for affect on stressful days: two intensive longitudinal studies. *Emotion, 16*, 488–497.

Fullagar, C. J., & Kelloway, E. K. (2009). "Flow" at work: an experience sampling approach. *Journal of Occupational and Organizational Psychology, 82*, 595–615.

Gardner, H. (1993). *Creating minds*. New York, NY: Basic Books.

Hektner, J. M., Schmidt, J. A., & Csikszentmihalyi, M. (2007). *Experience sampling method: Measuring the quality of everyday life*. Thousand Oaks, CA: Sage.

Hocevar, D. (1979, April). *The development of the Creative Behavior Inventory (CBI)*. Paper presented at the annual meeting of the Rocky Mountain Psychological Association (ERIC Document Reproduction Service no. ed. 170 350).

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Kaufman, J. C., & Beghetto, R. A. (2009). Beyond big and little: the Four C Model of creativity. *Review of General Psychology, 13*, 1–12.

McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of Personality and Social Psychology, 52*, 1258–1265.

Nusbaum, E. C., & Silvia, P. J. (2011). Shivers and timbres: personality and the experience of chills from music. *Social Psychological and Personality Science, 2*, 199–204.

Nusbaum, E. C., & Silvia, P. J. (2014). Unusual aesthetic states. In P. P. L. Tinio, & J. K. Smith (Eds.), *The Cambridge handbook of the psychology of aesthetics and the arts* (pp. 519–539). Cambridge, UK: Cambridge University Press.

Nusbaum, E. C., & Silvia, P. J. (In Press). What are funny people like? Exploring the crossroads of humor ability and openness to experience. In G. J. Feist, R. Reiter-Palmon, & J. C. Kaufman (Eds.), *Cambridge handbook of creativity and personality research*. New York, NY: Cambridge University Press.

Nusbaum, E. C., Silvia, P. J., Beaty, R. E., Burgin, C. J., Hodges, D. A., & Kwapil, T. R. (2014). Listening between the notes: aesthetic chills in everyday music listening. *Psychology of Aesthetics, Creativity, and the Arts, 8*, 104–109.

Richards, R. (2007). Everyday creativity: Our hidden potential. In R. Richards (Ed.), *Everyday creativity and new views of human nature: Psychological, social, and spiritual perspectives* (pp. 25–53). Washington, DC: American Psychological Association.

Richards, R. (2010). Everyday creativity: Process and way of life—Four key issues. In J. C. Kaufman, & R. J. Sternberg (Eds.), *Cambridge handbook of creativity* (pp. 189–215). New York: Cambridge University Press.

Sawyer, R. K. (2006). *Explaining creativity: The science of human innovation*. New York, NY: Oxford University Press.

Schwarz, N. (2012). Why researchers should think "real-time": A cognitive rationale. In M. R. Mehl, & T. S. Conner (Eds.), *Handbook of research methods for studying daily life* (pp. 22–42). New York, NY: Guilford Press.

Silvia, P. J. (2012). Human emotions and aesthetic experience: An overview of empirical aesthetics. In A. P. Shimamura, & S. E. Palmer (Eds.), *Aesthetic science: Connecting minds, brains, and experience* (pp. 250–275). New York: Oxford University Press.

Silvia, P. J., & Kaufman, J. C. (2010). Creativity and mental illness. In J. C. Kaufman, & R. J. Sternberg (Eds.), *Cambridge handbook of creativity* (pp. 381–394). New York: Cambridge University Press.

Silvia, P. J., Wigert, B., Reiter-Palmon, R., & Kaufman, J. C. (2012). Assessing creativity with self-report scales: a review and empirical evaluation. *Psychology of Aesthetics, Creativity, and the Arts, 6*, 1–16.

Silvia, P. J., Kwapil, T. R., Eddington, K. M., & Brown, L. H. (2013). Missed beeps and missing data: dispositional and situational predictors of non-response in experience sampling research. *Social Science Computer Review, 31*, 471–481.

Silvia, P. J., Beaty, R. E., Nusbaum, E. C., Eddington, K. M., Levin-Aspenson, H., & Kwapil, T. R. (2014b). Everyday creativity in daily life: an experience-sampling study of "little c" creativity. *Psychology of Aesthetics, Creativity, and the Arts, 8*, 183–188.

Silvia, P. J., Kwapil, T. R., Walsh, M. A., & Myin-Germeys, I. (2014a). Planned missing data designs in experience sampling research: Monte Carlo simulations of efficient designs for assessing within-person constructs. *Behavior Research Methods, 46*, 41–54.

Watson, D. (2000). *Mood and temperament*. New York: Guilford.

Weisberg, R. W. (2006). *Creativity: Understanding innovation in problem solving, science, invention, and the arts*. Hoboken, NJ: Wiley.

Whitfield, T. W. A., & de Destefani, L. R. (2011). Mundane aesthetics. *Psychology of Aesthetics, Creativity, and the Arts, 5*, 291–299.

Wolfradt, U., & Pretz, J. E. (2001). Individual differences in creativity: personality, story writing, and hobbies. *European Journal of Personality, 15*, 297–310.