

30 Creativity's Role in Everyday Life

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When asked about creativity, most people would mention creative giants such as Frank Lloyd Wright, Sylvia Plath, or Pablo Picasso or landmark creative works such as *Fallingwater*, *The Colossus*, or *Guernica*. Yet these domain-changing examples of Big-C creativity are just the tip of the iceberg of human creativity. For every work like *Fallingwater*, there are a million grown-ups-stay-away clubhouses constructed from cardboard boxes. For every poem in *The Colossus*, there are millions of poems by maudlin teens who “just can’t even.” For every “Blue Period” piece mounted on a museum wall, there are untold millions of “finger paint periods” taped to refrigerators.

This vast bulk of the creativity iceberg – people’s countless creative hobbies, goals, products, and fleeting ideas – has not traditionally been the concern of major theories of creativity, which emphasize creative accomplishments that are publicly recognized, domain-changing, and often revolutionary (e.g., Csikszentmihalyi, 1988; Gardner, 1993; Sawyer, 2006; Simonton, 2004). But even the most revolutionary idea started somewhere, and that place probably wasn’t a world-famous museum or performance hall. Instead, both landmark creative works and common creative acts are usually situated in their creators’ complex, idiosyncratic, and utterly ordinary environments (Tanggaard, 2015): bouncing around ideas in a café, letting the mind wander while walking through the woods, or doodling on a sketch pad kept by the toilet.

This chapter explores creativity in everyday life. We describe the two main strands of thought in this area: studies of ordinary *mini-c* (personally meaningful creative insights) and *little-c* creativity (creative acts by non-experts; Beghetto & Kaufman, 2007), and studies of the situated ecology of all levels of creativity. After reviewing these strands, we place them in the context of the rapidly growing use of ecological assessment methods, which allow researchers to study psychological events as they happen in the real world. Our review considers some issues for the growing use of ecological assessment and then describes some lines of research that illustrate the insights they can give into what creativity looks like in people’s everyday environments.

Two Senses of Creativity in Everyday Life

Everyday Creativity in the Four C Model

When creativity researchers talk about creativity in everyday life, they usually mean one of two things. The first sense is the study of “little-c creativity”: the creative

passions and pursuits of noneminent creators from all ages and walks of life. Eminent, domain-changing creative works deserve the attention they get but they represent the tip of creativity iceberg. For each Big-C, eminent work, there are countless common insights, ideas, and innovations that don't lead to domain-changing creative products. These everyday creative acts and ideas are the submerged bulk of the iceberg. The poems and songs and cupcake recipes of noneminent creators might not be publicly acclaimed and domain-changing but they represent the vast bulk of humanity's creative activity.

The Four C model (Kaufman & Beghetto, 2009) provides a fruitful framework for clarifying what the smaller forms of creativity look like (see Kaufman & Glăveanu, Chapter 2, this volume). This model distinguishes four ordered classes of creativity: *Big-C*, *Pro-c*, *little-c*, and *mini-c*. *Big-C* and *Pro-c* refer to eminent and professional-level creative accomplishments, respectively. *Big-C* and *Pro-c* accomplishments are public, significant achievements that require expertise within a specific domain. *Big-C* accomplishments are eminent works that define or change a creative domain, whereas *Pro-c* accomplishments are significant works by practitioners in a domain that contribute to its growth but are not eminent within the domain.

Moving down the Four C spectrum, *little-c* creativity, sometimes also referred to as *everyday creativity*, is something that is practiced by virtually everyone, not only people who possess the technical skills or expert knowledge required for *Pro-c* and *Big-C* creativity. *Little-c* creativity, in the Four C model, must meet the common "novel and appropriate" criteria for creative works but the novelty refers to the creator herself, not for the domain at large (Weisberg, 2006). *Little-c* creativity thus often results in novel products that are nevertheless variations on existing themes in a domain. As a result, *little-c* creativity covers a vast range of actions, from writing a song, making a new grill seasoning, refinishing a coffee table in a new color, and using scrapbook supplies to craft a perky-yet-menacing "Paws Off My Greek Yogurt" sign for the shared workplace fridge.

Mini-c creativity, the last category in the Four C model, involves "the novel and personally meaningful interpretation of experiences, actions, and events" (Beghetto & Kaufman, 2007, p. 73). This concept strikes us as the most fertile and intriguing concept in the Four C model. *Mini-c* creativity captures the small acts of insight, wit, mental restructuring, imagination, and improvisation in daily life. The range of examples is vast, from recognizing an opportunity to improvise during a class discussion (Beghetto & Kaufman, 2007), creating imaginary stories while day-dreaming, thinking about how something from one's past recasts the meaning of something that just happened, and introducing funny quips into conversations. These *mini-c* ideas might not be public or result in a tangible creative product but they reflect the creation of new ideas and knowledge.

The concept of *mini-c* implies that creativity is inherent in human thought: When we construe patterns, have insights, and introduce variety instead of sameness into our actions, we're exercising creativity. Tanggaard's (2015) pathways model of creativity develops this general stance by proposing that "the conduct of life in itself can be a creative act" (p. 181). The creative pathways model emphasizes the actions and decisions we make in everyday life as we interact with other people and the

environment. Situations in our lives are not always predictable, and the choices we face are not always obvious, so we must use some measure of improvisation to navigate our daily lives. These improvisations could be observed by studying the interactions between people or between people and objects. The pathways approach emphasizes that mini-c creativity is always *situated*: it happens in an environment and is shaped by the situation's structure and affordances. Although most of these creative pathways may be classified as mini-c insights, many might qualify as little-c creative acts, such as diffusing a tense or dangerous situation with an unanticipated but effective action (Richards, 2007) or using inventive turns of phrase in a conversation with friends (Pachucki, Lena, & Tepper, 2010). In short, this first sense of everyday creativity – little-c and mini-c creative products, acts, and ideas – implies that a typical day is stuffed with creativity, if not inherently creative (Bateson, 1999; Tanggaard, 2015).

The Situated Ecology of Creativity

Another sense of creativity in everyday life is the ecological study of creativity: what it looks like and how it unfolds in natural environments. This tradition seeks to study creativity as it happens, where it happens. It thus emphasizes the essentially situated and contextual quality of creativity. Ecological studies of creativity, for example, study how scientists develop theories and experiments in their frumpy research labs (Dunbar, 1997), how garden designers think through design problems in their studios (Pringle & Sowden, 2017), and how architecture students experience flow and motivation while grinding away at their studio desks (Fullagar & Kelloway, 2009).

An ecological approach to creativity seeks to get up close to creativity as it happens, so it isn't committed to any particular C in the Four C model. Some ecological studies have observed eminent and professional creators, such as how accomplished scientists develop research ideas (Dunbar, 1997) or how professional garden designers mesh top-down and bottom-up modes of thinking (Pringle & Sowden, 2017). Other studies, however, look at the natural ecology of little-c and mini-c creativity, such as improvisation in everyday social interactions (Tanggaard, 2015), observational studies of children's pretend play (Russ, 2013), and classroom studies of creative teaching and learning (Beghetto & Kaufman, 2016).

The ecological approach has an essentially situated and transactional view of creativity. In these models, creativity doesn't simply happen – it happens somewhere, and that *where* is essential to understanding the creative process. People's environments are wide-ranging – a shabby preschool with plastic baskets of broken crayons, a high-tech lecture hall, a jail cell with a small golf pencil and a few books of poetry – and these environments spark, shape, and constrain what people can do (Glăveanu, 2010; Tanggaard, 2015). At the same time, people also often pick which environments to enter and shape the environment to suit their goals (Allport, 1958). Creativity is thus situated (it happens somewhere) and transactional (it emerges from negotiating an environment).

How Can We Measure Everyday Creativity?

For researchers interested in studying mini-c and little-c creativity, how can it be measured? One common approach is to use self-report instruments that ask people to describe their own creative behaviors and hobbies. Some of these measures, such as the Creative Behavior Inventory (Hocevar, 1979; revised version in Dollinger, 2003) and the Biographical Inventory of Creative Behaviors (Batey, 2007), present people with a range of creative hobbies and activities from different domains and ask them to select the ones they engage in. Inventories using this “activity list” approach have been widely used and have good psychometric properties (Silvia et al., 2012).

But there are some problems with using activity lists to measure everyday creativity. First, people who receive high scores are people who report engaging in creative activities in a variety of domains. Someone who dabbles in jewelry making, poetry writing, and cupcake decorating would get a higher score than someone who is passionately devoted only to jewelry making. Breadth of creative engagement across many domains is rewarded, and these measures largely ignore deeper creative engagement in one or a few domains. These activity lists are also self-report measures, which are susceptible to exaggeration and recall bias.

Second, these activity-list measures aren't all-encompassing. People have a wide variety of interests, creative or otherwise, so it is unlikely that a list of common creative activities can capture the diversity of people's creative engagement. People with offbeat creative hobbies, such as subversive cross stitching (Jackson, 2015) or choreographing a modern belly-dance troupe, won't be captured on the typical self-report list. One potential solution is to ask people what hobbies and activities they participate in. Wolfradt and Pretz (2001), for example, asked people to list their hobbies, which were then rated for creativity by trained raters, who considered activities that require active engagement (e.g., drawing) to be more creative than passive activities (e.g., watching television). This approach will capture uncommon and quirky creative activities.

Ecological Momentary Assessment

Many other approaches have been used, such as semi-structured interviews, observational studies, and a range of qualitative methods (see Richards, 2007; Tanggaard, 2015). One particular method, however, stands out: *ecological momentary assessment* (EMA). EMA is a technique used to assess psychological variables in people's everyday, naturalistic, environments. The method thus combines the quantitative emphasis of traditional self-report assessment with the situated, contextual emphasis of ecological approaches to creativity. When participants are brought into the lab and asked to be creative on a task, they're trying to be creative while sitting in an unfamiliar lab room surrounded by strangers. Such artificial environments do not resemble the environments that we often choose to create in. EMA allows researchers to assess creativity as it happens within the environments that it naturally happens.

EMA in creativity research has typically taken one of two forms: *daily diaries* or *experience sampling*. A daily diary approach typically has participants answer a series of self-report questions once a day about what they did and how they felt throughout that day (Gunthert & Wenzel, 2012). Since participants are doing this only once a day, daily diary surveys tend to ask more questions per day and to last for weeks or months. An experience-sampling approach, on the other hand, typically signals participants at random points during the day to answer questions about what they were doing and thinking when they were signaled. As a tradeoff for the number of surveys sent to people, these questionnaires tend to be shorter than those used in daily diaries, and experience sampling studies last days rather than weeks or months.

EMA techniques have many virtues for studying everyday creativity. First, we are able to study creativity as it naturally happens. As previously stated, everyday creativity is not something we can completely understand from lab-based studies – we must consider the environmental influences on this process (Hennessey, 2015). A typical day is fluid and complex. Bringing people into the lab and asking them about what they do in their normal environments isn't likely to illuminate how complex situations influence creativity.

Second, EMA assesses people as close to the events as is practical, so people don't need to reflect back over long time intervals to report about what they typically do. There are discrepancies between EMA and retrospective measurements for many phenomena (e.g., musical imagery, Cotter & Silvia, 2017; quality of life, Maes et al., 2015; activities in daily life, Sonnentag et al., 2012). Oftentimes, there are aspects of an experience that slip under the attentional radar, such as the moment-to-moment fluctuation in emotions that are not recalled as accurately using retrospective measures (Reis, 2012; Schwarz, 2012). The more salient features, such as overall frequency of engagement in creative activities, may be accurately recalled in retrospective measures but the fluctuating aspects of the environment are less likely to be memorable. Although the differences between retrospective and in-the-moment reports have not been tested in regard to creativity in everyday life, it seems likely that EMA may be best equipped to examine everyday creativity in everyday environments.

Additionally, there is some evidence that people are not well equipped to report retrospectively on irregular or infrequent activities. Sonnentag and colleagues (2012) investigated how much time people spent on various activities using both experience sampling and retrospective reports. For activities they engaged in frequently and on a scheduled, regular basis, such as hours spent working, people gave similar reports using experience sampling and retrospective surveys; for irregular activities not on an external schedule, such as hours spent doing leisure activities, experience sampling and retrospective reports did not match up as well. For many people, everyday creativity would likely occur irregularly rather than on a fixed external schedule.

Third, many experiences vary within a person across time, and retrospective measures obscure this within-person variability. When we assess experiences multiple times, we are able to observe this within-person variability, which is interesting in its own right (Fleeson, 2004). If there are aspects of creativity in daily life that are

highly variable, we miss out on information when we use retrospective measures to ask people about their typical or average creative experiences. With EMA techniques, however, we are able to capture this information through maintaining the diversity of experiences rather than asking for an aggregate response (Schwarz, 2012; Silvia, Cotter, & Christensen, 2017).

Finally, EMA allows for longitudinal measurement of the creative process and progress toward a creative goal over short time scales, which is impractical with traditional survey or inventory measures of everyday creativity. For example, Benedek and colleagues (2017) recently used daily diaries to track the progress of a creative project – a short film or video for an art competition – and project-related behaviors and feelings over the course of two weeks. The visual artists reflected on the status of their creative project each evening and completed the survey. This longitudinal design allowed the researchers to examine trajectories of emotions, thoughts, and creative progress across the two weeks.

What Have We Learned About Creativity in Everyday Life?

Although there has been work examining little-c creativity using creativity inventories and other retrospective measures, we will focus on work that has assessed everyday creativity in everyday life using EMA techniques. Although there hasn't been much creativity research using EMA techniques, the method is becoming increasingly popular, and the few studies that have been done show that it is fruitful and feasible to use these approaches in creativity research.

How Often Do People Pursue Creative Projects?

One basic question EMA can illuminate is how often people work on creative projects during a typical day. Silvia and colleagues (2014) asked college students "Are you doing something creative?" several times throughout the day for one week using participants' personal phones. On average, people were doing something they felt was creative 22 percent of the time. Later studies have reported similar levels of engagement in creative activities. Other samples have reported doing something creative on 43 percent of the studied days (Karwowski et al., 2017, Study 2) or being "a little" creative on most days (Conner & Silvia, 2015), and middle-aged adults report frequent creative engagement (33 percent of the time; Karwowski et al., 2017, Study 1).

People are regularly creative in their everyday lives but are there some people who tend to be creative more or less frequently? One of the consistent findings in creativity research is the association between creativity and openness to experience (Oleynick et al., 2017). Consistent with past work, people higher in openness to experience engage in creative activities more frequently in their daily lives (Conner & Silvia, 2015; Karwowski et al., 2017; Silvia et al., 2014). Conscientiousness, agreeableness, and low neuroticism have also been associated with doing more creative activities in daily life (Karwowski et al., 2017). Additionally, college

major matters – students majoring in the arts were very frequently creative (39 percent of the time) but students not concentrating in the arts were still frequently engaged in creative activities (19 percent of the time; Silvia et al., 2014).

Inner Experience and Daily Creativity

How do inner experiences, like moods, emotions, and flow states, relate to creativity? The links between affect and creativity have been studied intensively using experimental, developmental, and cross-sectional correlational methods (Baas, De Dreu, & Nijstad, 2008; Russ, 1993; see Baas, Chapter 12, this volume), but how does affect relate to creativity in the moment, in the time and place where someone is working on a creative goal? Silvia and colleagues (2014) examined both positive and negative moods many times per day and found that feeling happy or active at a given survey signal was associated with doing something creative at that survey signal. The findings thus broadly supported experimental research, which has found that positive, active states are most strongly linked to creative thought (Baas et al., 2008).

Conner and Silvia (2015) measured a range of positive and negative emotions at differing activation states (e.g., measuring positive affect across a range of activation levels, such as *energetic*, *happy*, and *relaxed*). At the within-person level, both positive and negative emotional states predicted being creative on that day. Positive emotion at all three activation levels was positively associated with being creative – the strongest predictor was high activation positive emotional states (feeling enthusiastic, excited, and energetic). Negative emotional states also were associated with being creative but negatively – doing something creative was less likely on days characterized by high levels of negative emotion. These associations were weaker than those with positive states. At the between-person level, positive emotions at all activation levels and high activation negative emotions (feeling angry, hostile, and irritable) were positively correlated with creativity. Consistent with Richards' (2007) view of creativity, the findings from Silvia and colleagues (2014) and Conner and Silvia (2015) suggest that creativity is more closely associated with positive psychological functioning rather than supporting the stereotypical layperson's view that everyday creativity must come from a place of pain and suffering.

To further clarify creativity's association with these positive states, Conner, DeYoung, and Silvia (2018) investigated whether everyday creativity increases people's well-being using the same data set as Conner and Silvia (2015). Specifically, they examined how being creative on one day carried over to measures of well-being (positive affect, negative affect, and flourishing) on the following day. In addition to the emotional state items used in the prior study, flourishing was measured by items about feelings of purpose and meaning in life, engagement, and social connectedness. Being creative on day one predicted increases in positive affect and, more strongly, increased flourishing on the following day. Even after controlling for being creative on day two, creativity on day one was still able to predict increases in high activation positive emotional states and flourishing. This was not a reciprocal relationship, however –

positive affect and flourishing did not predict being creative on the following day. Interestingly, personality factors did not moderate these relationships – everyday creativity is beneficial to a range of people, not just a select group or disposition. So, it seems that in a sample of young adults, everyday creativity increases well-being.

Other studies have examined *flow*, a rewarding state in which people feel fully absorbed in what they are doing (Csikszentmihalyi, 1990). Interestingly for our purposes, flow research has long ties to creativity (e.g., Csikszentmihalyi, 1996; Perry, 1999) and to experience sampling methods. Many of the early innovations in experience sample research were developed in the context of flow research (e.g., Csikszentmihalyi, 1975; Csikszentmihalyi & Figurski, 1982; Csikszentmihalyi & LeFevre, 1989).

In a study of flow, Fullagar and Kelloway (2009) used experience sampling to measure flow in a sample of architecture students working on projects in their studio space. They found that flow experience was highly variable: only 25 percent of the variance was at the between-person level, so flow was much more of a state concept than a trait. Furthermore, situational features associated with flow were feelings of high autonomy for the creative project and believing that the task required a range of different skills. Flow was thus encouraged by creative projects involving choice and diverse skills. Finally, flow was associated with active, positive emotions, further bolstering the other EMA studies of creativity and mood (Conner et al., 2018; Silvia et al., 2014). This study thus illustrates that flow is a dynamic concept that varies from situation to situation and identifies some features of the projects that encourage it (cf. Perry, 1999).

How Do Creative Projects Unfold?

In addition to capturing everyday instances of creativity, EMA can be used to follow the progress of a creative project and examine the creative process over time. Benedek and colleagues (2017) followed a group of professional visual artists over the course of two weeks as they completed a video entry for a competition. Over the course of the two weeks, the artists completed daily diaries: They reported how complete their project was and then described their affect and work style when working on the project. Although each creative project unfolded differently, Benedek and colleagues found that people generally felt positively and lost sense of time when working on their projects. Progress on the creative projects was associated with enjoying the work, deliberately choosing to spend time on the project, and focusing on the details of the project. Feeling anxious and a sense of “walking in a dense fog” hindered progress toward a finished product. Participants in this study were Pro-c visual artists, and future research should examine the creative process in people who have more casual creative interests and hobbies.

Imagination in Daily Life

In addition to tangible products that everyday creativity produces, people often experience mini-c creativity internally. Daydreaming and mind-wandering often

receive negative reputations as being distracting failures of mental control and attention (McMillan, Kaufman, & Singer, 2013; Seli et al., 2016) but these mental processes can be willfully and intentionally guided (Seli et al., 2016) and produce personally interesting insights and creations. One view suggests that positive constructive daydreaming – consisting of creative thought and other forms of imagination – is essential for healthy mental functioning (McMillan et al., 2013). People get personal meaning through reflecting on their experiences and gain insight through simulating future events, all of which would qualify much of this mental activity as mini-c creativity. Constructs such as these have not traditionally been associated as being creative processes but taking a fresh perspective on daydreaming and spontaneous thought could take the study of everyday creativity in interesting new directions.

One example of this reframing can be applied to inner music – the experience of hearing music in one's mind that isn't playing in the environment (Beatty et al., 2013). People do intentionally initiate inner music during their everyday lives (Cotter, Christensen, & Silvia, in press) and this experience can serve a number of functions. Musicians will use musical imagery to rehearse and simulate upcoming performances (Bailes, 2006; Gregg, Clark, & Hall, 2008) and inner music likely plays a role in musical composition as well. Both of these functions can easily be connected to creativity – with this mental simulation, musicians can play around with new ideas before applying them to an actual performance or composition. But all inner music is something that people are creating in their minds – although the music may not be their own, they are self-generating this experience in the absence of external stimuli. Musical imagery is just one example of private, internal instances of mini-c creativity.

Mini-c creativity has not received much attention in the imagination literature, and these internal processes, such as daydreaming, mind-wandering, and other related processes, may be a place to start. In asking about the content and qualities of these mental experiences, we may be able to further understand mini-c creativity and include all four Cs in current research practices.

Conclusion

In this chapter, we proposed that the label *everyday creativity* has two distinct senses: the study of mini-c and little-c creators and their work, and the ecological study of creativity in natural environments. These two approaches overlap and we suggested that interest in each has been growing as research methods for studying psychological processes in vivo have become more practical and widespread. The growth of EMA methods looks like a significant trend in recent creativity research and we reviewed some recent lines of research with EMA methods to illustrate the kinds of questions they can explore. If the science of creativity examines creativity where and when it happens, whether it is a group of preschool children in a music class or a renowned sculptor in her studio, we think it will uncover new insights into people's essentially creative natures.

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