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The Importance of the Componential Model of Creativity

Christina E. Shalley

Teresa Amabile's Componential Model of Individual Creativity (Amabile, 1983) set the stage for a new era in the study of creativity. Essentially, using a social psychological perspective, she moved the primary focus of much of the research from looking at more of a personcentric approach (e.g., examining highly creative individuals in order to understand why they are so creative) to looking at how the work context can have important effects on individual creativity. In addition, together with the interactionist perspective of creativity (Woodman, Sawyer, & Griffin, 1993), she discussed how personal factors, contextual factors, and their interaction can significantly affect employee creativity. The purpose of this chapter is to reflect on the influence of Teresa's

C. E. Shalley (⋈)

Scheller College of Business, Georgia Institute of Technology,

Atlanta, GA, USA

e-mail: christina.shalley@scheller.gatech.edu

Componential Model of Individual Creativity and her development of the consensual assessment technique for my own research.

By using the Componential Model in a literature synthesis (Shalley, Zhou, & Oldham, 2004), we were able to organize the literature in a cohesive fashion, and to discuss areas in need of future research going forward. For example, we noted that much of the literature that had been conducted was focused on individual creativity, with less research focusing on team creativity. Recently, we have seen significant progress on team creativity research (e.g., Hu, Erdogan, Jiang, Bauer, & Liu, 2017; Mannucci, 2017; Perry-Smith & Shalley, 2014). For example, Y. Li, N. Li, C. Li, and J. Li (2020) drew on a social model of team creativity and developed a dualistic model of the influence of team members who were creative stars on team creativity. They found that a creative star who occupies a central position in the team workflow network has both a positive direct effect on team creativity and a negative indirect effect on team creativity by reducing the learning of members who were nonstars. Also, they found that team coordination can buffer this negative indirect effect on team creativity.

The Componential Model consists of three important factors; that of, domain-relevant skills, creativity relevant skills, and intrinsic motivation. Both the domain-relevant skills and creativity relevant skills were more about the person in terms of their existing knowledge base, and their ability to engage in both divergent and convergent thinking in order to effectively produce creative outcomes. Furthermore, intrinsic motivation was argued to be a critical factor, and contextual factors were proposed to influence individuals' intrinsic motivation. Stressing the key role of intrinsic motivation for creativity has resulted in a body of creativity research that predicts and explains how contextual factors can influence individuals' creativity via its effect on their intrinsic motivation. Some of my work on goal setting, expected evaluation, and competition has strongly relied on this motivation principle (e.g., Shalley, 1991, 1995; Shalley & Oldham, 1997), and in general, the results of this research have been supportive.

A related factor to the above is that by emphasizing a motivational perspective, this has led researchers, including myself, to also look at the important role of other motivational factors. For example, we conducted

a fairly recent meta-analysis (Liu, Jiang, Shalley, Keem, & Zhou, 2016) that examined the important role of motivation for creativity across 191 independent samples and over 50,000 employees. Specifically, four types of motivation were included, with three serving as the primary focus (i.e., self-efficacy, prosocial motivation, and intrinsic motivation) and controlling for one in the analysis (i.e., extrinsic motivation). Selfefficacy represents a person's belief that they can be effective on a task, and according to social cognitive theory it can serve as a motivational mechanism. Prosocial motivation is the motivation to focus on novel discoveries that are useful for others according to prosocial motivation theory. In this meta-analysis, we first looked at studies that included the role of creative self-efficacy or general self-efficacy and found significant effects on creativity. Second, the role of prosocial motivation was examined with this also having significant effects on creativity. Third, the role of intrinsic motivation was examined and it also had significant effects on creativity. In general, our results indicated that each of the three types of motivation (i.e., intrinsic motivation, self-efficacy, and prosocial motivation) all simultaneously contributed to creativity. Thus, by using the intrinsic motivation principle, we have expanded on the relationship between other motivational mechanisms for creativity by showing that each of these types of motivation can have an effect on creativity.

In the above-referenced meta-analysis (Liu, et al., 2016), we also found that various contextual and personal factors had different relationships with each of the three different types of motivation. Along this line, we conducted a recent piece (Wang, Liu, & Shalley, 2018) where we examined the effect of idiosyncratic work arrangements (i.e., i-deals) on individual creativity via creative self-efficacy (i.e., an individual's belief that they can be creative on a task). I-deals are individualized work arrangements that are offered to high performing employees either to attract or retain them. We found that i-deals fully mediated the effect for developmental i-deals (e.g., receiving training to enhance their career development), and only partially mediated the effect for flexibility i-deals (e.g., working from home during certain days or hours). In addition, in another study, we looked at whether people high on creative personality are more likely to behave unethically (Keem, Shalley, Kim, & Jeong, 2018). Specifically, research in this area has resulted in mixed findings.

We hypothesized and found that moral disengagement and moral imagination are two parallel mechanisms that encourage or inhibit unethical behavior, with which of these mediation processes occurring depending on moral identity. So, for example, our results across two studies indicated that employees high on dispositional creativity and moral identity were less likely to be morally disengaged and behave less ethically. In addition, those high on both dispositional creativity and moral identity were more likely to be morally imaginative and to behave less unethically. In summary, the specific personal and contextual factors that influence creativity are continuing to be discovered as we detail how and when various motivational mechanisms influence creativity.

In discussing her Componential Model of Creativity, Teresa also focused on how creativity should be defined and how it can be assessed. In terms of her definition, creativity is culturally and historically defined, but in general includes both novelty and usefulness (or appropriateness). This definition is widely accepted and has been used extensively in the literature. In addition, I believe that a major contribution that Teresa has made to the literature is in developing her consensual assessment technique (CAT) to use in order to reliably assess whether a product is creative. The CAT involves having knowledgeable others independently evaluate how creative an idea, product, or process is using the definition of creativity. Both the introduction of the requirement that a product needs to be both novel and useful, and the use of the CAT has led to great strides being made in developing the creativity literature since we can appropriately be able to determine what may or may not be considered to be creative in the field. I have used this technique many times and in a number of studies, and it is widely considered to be highly valid and reliable. In fact, in a recent paper (Koseoglu, Liu, & Shalley, 2017) we adapted the CAT in order to evaluate how creative managers are by having multiple subordinates of a manager rate their manager's level of creativity. That is, instead of taking the assessment of one employee or the manager's supervisor, we took the assessment of three or more of a manager's employees after ensuring that this was appropriate via statistical tests (i.e., Cronbach's alpha, ICC1 and ICC2). This is the first time that the CAT was used in this way, but I believe it could be helpful in the future as more work looks at the effect of subordinates or followers on

their managers or leaders. Also, this approach could be used by having coworkers or team members assess the creativity of another employee or team member.

In summary, Teresa Amabile's introduction of the influential Componential Model of Individual Creativity has dramatically moved the field of creativity forward. As of today, creativity research is thriving with multiple researchers studying all different aspects of individual and team creativity. We now have learned quite a bit about individual creativity, in particular, but there is still much more that we need to learn about how to stimulate and support employee creativity. Moreover, we know less about how not to stifle or constrain individual or team creativity, and a great deal of work is still needed to study this issue.

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