Do People Recognize the Four Cs? Examining Layperson Conceptions of Creativity

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Researchers examine implicit beliefs about creativity to understand what laypeople think. Past work has looked at cultural differences, characteristics associated with creativity, and the positive or negative valence that people feel toward creativity. In this study, we focused on the Four C Model of Creativity (Beghetto & Kaufman, 2007; Kaufman & Beghetto, 2009) to discover if laypeople perceive nuances in different levels of accomplishment. We found that although Pro-c and little-c merged into one factor, Big-C, mini-c, and Not-c (not creative) were distinguishable. Personality (particularly agreeableness and openness) predicted how participants rated different levels of creativity.

**Keywords:** creativity, personality, beliefs, implicit theories, Four C Model of Creativity

How do we study creativity? One way is via explicit theories proposed by researchers. Some focus on creative thought, such as Guilford’s (1967) Structure of Intellect theory or the Geneplore model (Finke, Ward, & Smith, 1992), or creative products, such as Csikszentmihalyi’s (1999) Systems model or the Propulsion Theory of Creative Contributions (Sternberg, Kaufman, & Pretz, 2002). Others highlight the many constructs necessary for creativity, such as Amabile’s (1996) Componential Model and Sternberg and Lubart’s (1996) Investment Theory.

Another way of studying creativity is to find out what nonresearchers think. This method involves asking laypeople (or, occasionally, artists or other groups) questions about creativity. These questions can be direct, to tap into how people define creativity, or indirect, to discover potential biases. Such work allows us to examine people’s implicit theories of creativity.

**Implicit Theories of Creativity**

Most past research on implicit theories of creativity has emphasized associated characteristics and personality traits, positive/ negative valence, and cultural differences. Gough’s (1979; Gough & Heilbrun, 1965) early work using adjectives to measure personality was often applied to creativity. For example, Welsh (1975) explored two dimensions of self-perception: “intellectence” (intellectual behavior and functioning) and “origience” (aesthetics and originality). Sternberg’s (1985) landmark study on layperson theories of creativity outlined four dimensions: nonentrenchment, aesthetic taste/imagery, perspicacity, and inquisitiveness. Creativity was seen as distinct from intelligence, albeit with much overlap. Related descriptors included unconventionality, inquisitiveness, imagination, and freedom. Lim and Plucker (2001) replicated Sternberg’s work in a Korean population. Saunders Wickes and Ward (2006) investigated gifted adolescents’ belief about their own creativity and others’ creativity using items from a creativity descriptor checklist. The students’ self-beliefs centered around four factors: risk-taking, awkwardness, intellect, and impulsiveness. Those same students’ beliefs about others resulted in four different factors: artistic individualism, activity level, popularity, and questioning. It is interesting to note that students described more positive personality attributes when thinking of other people.

Lim and Plucker (2001) found that implicit views of creativity were linked to negative social behaviors. This connection has been found in many different contexts and types of studies. For example, Westby and Dawson (1995) found that teachers said they liked creative students; however, when asked to define creativity, they used words such as “well-behaved” or “conforming.” When the same teachers were given adjectives that were typically used more to describe creative people, they said they disliked these types of students (see also Aljughaiman & Mowrer-Reynolds, 2005). Beyond the classroom, laypeople can also show these biases. When primed to be intolerant of uncertainty, people with positive or neutral explicit views of creativity demonstrated implicit biases against creativity (Mueller, Melwani, & Goncalo, 2012). Likewise, Mueller, Goncalo, and Kamdar (2011) found that creativity is viewed as a negative trait for leaders.

Another avenue for studying layperson beliefs is to examine cross-cultural differences. For example, unlike the Western research discussed above, Chinese implicit conceptions of creativity emphasize such characteristics as moral goodness, societal contributions, and connections between new and old (Niu & Sternberg, 2013).
Averill, Chon, and Hahn (2001) proposed that Eastern and Western cultures value a creative product’s effectiveness. They argue that the West values a piece’s novelty whereas the East is more concerned with authenticity (if something represents the creator’s personal values and beliefs). However, when Paletz and Peng (2008) asked students from Japan, China, and the United States to rate products, they discovered surprising results. Chinese people were more influenced by novelty and less by appropriateness in their desirability ratings than Japanese and Americans.

In addition to the cross-cultural studies on novelty and effectiveness (which are often seen as the two main tenets of a creativity definition; see Amabile, 1996), other implicit studies focus on layperson conceptions of expert theories. Sen and Sharma’s (2011) examination of creativity beliefs in India can be compared to the explicit (and Western) theory of the Four P’s (product, person, process, and press; Rhodes, 1962); they found that creativity was more likely to be described as a holistic essence of an individual (i.e., the person) and less likely to be focused on the product or process. Puccio and Chimento (2001) tested people’s perceptions of Kirton’s (1976) adaptor-innovator distinction and found that the innovative style was considered significantly more creative. One explicit theory that has not been examined from a layperson lens is the Four C Model of Creativity, which takes a developmental trajectory approach to creativity.

The Four C Model of Creativity

Many discussions of creativity tend to focus on one of two levels of creativity: everyday expressions of creativity (or “little-c” creativity) or genius-level creativity (or “Big-C” creativity). Kaufman and Beghetto (2009, in press; see also Beghetto & Kaufman, 2007) proposed two additional categories in their Four C Model of Creativity: “mini-c” and “Pro-c.” Mini-c creativity is subjective self-discoveries—the novel and personally meaningful insights and interpretations inherent in the learning process. Pro-c creativity is expert-level creativity that has not yet attained legendary and interpretations inherent in the learning process. Pro-c creativity is expert-level creativity that has not yet attained legendary

Participants

The 1,3642 participants in this study were college undergraduate students that were recruited to participate in this study. Students were predominately female (86%) and were, on average, in their early twenties (M = 24, SD = 6.89). Students reported their ethnicity as Hispanic American (n = 643, 47.1%), White (n = 363, 26.6%), African American (n = 134, 9.8%), Asian American (n = 124, 9.1%), or biracial/other (n = 100, 7.3%).

Method

Data were collected via an online survey. Participants received class credit for participation. The survey included a scale on perceptions of creativity, the International Personality Item Pool (IPIP) Five-Factor personality test, and items that asked students to report their age, gender, and ethnicity.

IPIP Five-Factor Personality Test. The five-factor model of personality was measured using the 50-item version of the IPIP (Goldberg, 1999; Goldberg et al., 2006). The IPIP comprises 10 Likert-type items (rated on a 1–5 scale) to measure each of five

1 Ritchie may well end up Big-C, but right now would be considered Pro-c.
2 Only participants (n = 1,364) who had complete responses on the variables of interest were included in this study, representing 86% of the original sample (N = 1,585).
personality factors: extroversion, agreeableness, conscientiousness, emotional stability, and openness. In this study, the reliabilities for each dimension were extroversion ($\alpha = .868$), agreeableness ($\alpha = .844$), conscientiousness ($\alpha = .795$), emotional stability ($\alpha = .840$), and openness ($\alpha = .770$).

**Perceptions of creativity.** Respondents were asked to rate the creativity of 20 descriptions of a product, person, or process on a five-point scale (1 = *not at all creative*, 5 = *extremely creative*). Of the 20 items, 16 represented descriptions for each of the four levels of creative magnitude represented by the Four C Model of Creativity (Kauffman & Beghetto, 2009). More specifically, the 16 items represented Big-C creativity (items 1 – 4), Pro-c creativity (items 5 – 8), little-c creativity (items 9 – 12), and mini-c creativity (items 13 – 16).

To explore whether lower levels of creativity might be associated with the absence of creativity, we also included four items that represented a not-creative category (items 17 – 20).

In an effort to examine the factor structure of these items, we randomly split the dataset into two equal datasets ($n = 682$) using the random sample option in SPSS 20. We performed exploratory factor analysis (EFA) on the first random sample ($n = 682$) and then used confirmatory factor analysis (CFA) on the second random sample ($n = 682$).

**Results**

**EFA**

We examined the 20 items using EFA in the first randomly split sample ($n = 682$). Specifically, we used maximum likelihood analysis with oblique (Promax) rotation. A three-factor solution was indicated by a combination of parallel analysis (using *MacParallel, Watkins, 2000*), Eigenvalues (>1.0), and inspection of the scree-plot. The three factors accounted for 47.6% of the variance, with the first factor accounting for 26.3% of the variance, the second accounting for 14.6%, and third accounting for 6.7% of the variance.

A summary of the analysis is presented in Table 1. The first factor was labeled Big/Pro/little (BPLC), reflecting creativity that other people recognize as creative, and spans the categories of little-c, Pro-c, and Big-C creativity (Kauffman & Beghetto, 2009). The second factor was labeled Not Creative (Not-c), reflecting noncreative behaviors and cognitions. Finally, the third factor was labeled Mini-c Creativity (MC), reflecting creativity recognized only by the creator (Beghetto & Kaufman, 2007). The latent factor intercorrelations ranged from .006 to .548 (with an average $r = .299$).

Taken together the results of the EFA indicate that latent structure of the 18 retained items was defined by three factors (BPLC, MC, and Not-c). We next examined this three-factor model (BPLC, MC, and Not-c) using CFA.

**CFA**

On the basis of the solution obtained from the EFA, a three-factor CFA model was fit to the second half of the randomly split sample ($n = 682$). Adequacy of fit was assessed using the following criteria: root mean square error of approximation (RMSEA < .08, 90% confidence interval [CI] < .08), comparative fit index (CFI ≥ .90), and the Tucker-Lewis index (TLI ≥ .90). The three-factor model did not adequately fit the data, $\chi^2(132) = 543.606, p < .001, \text{RMSEA} = .068 (90\% \text{CI} = .062, .074); \text{CFI} = .880; \text{TLI} = .860$. Poor-fitting models can result from specifying too many or too few factors (Brown, 2006). As such, we next examined a four-factor model, comprising the 18 items retained from the EFA.

Table 1

<table>
<thead>
<tr>
<th>Items</th>
<th>$M$</th>
<th>$SD$</th>
<th>Factor 1: BPLC</th>
<th>Factor 2: Not-c</th>
<th>Factor 3: MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A creative action that changes an entire field</td>
<td>4.20</td>
<td>.984</td>
<td>.460</td>
<td>−.365</td>
<td>.300</td>
</tr>
<tr>
<td>2. A creative product that is remembered and appreciated for more than 100 years</td>
<td>4.19</td>
<td>1.046</td>
<td>.716</td>
<td>−.146</td>
<td>−.121</td>
</tr>
<tr>
<td>3. Legendary creative work</td>
<td>4.14</td>
<td>.973</td>
<td>.648</td>
<td>−.231</td>
<td>.050</td>
</tr>
<tr>
<td>4. A creative genius</td>
<td>4.13</td>
<td>.988</td>
<td>.579</td>
<td>−.165</td>
<td>.096</td>
</tr>
<tr>
<td>5. A creative product that is sold around the country</td>
<td>3.79</td>
<td>1.017</td>
<td>.728</td>
<td>.072</td>
<td>−.196</td>
</tr>
<tr>
<td>6. A creative idea reflecting years of expertise</td>
<td>3.79</td>
<td>.977</td>
<td>.656</td>
<td>.079</td>
<td>−.015</td>
</tr>
<tr>
<td>7. A creative person who has been practicing his or her skill for many years</td>
<td>3.71</td>
<td>.984</td>
<td>.489</td>
<td>.176</td>
<td>.044</td>
</tr>
<tr>
<td>8. Creative work done by someone with an advanced degree</td>
<td>3.59</td>
<td>.950</td>
<td>.544</td>
<td>.159</td>
<td>−.083</td>
</tr>
<tr>
<td>9. A creative product that some people would be willing to buy</td>
<td>3.66</td>
<td>1.003</td>
<td>.596</td>
<td>.133</td>
<td>.003</td>
</tr>
<tr>
<td>10. Any type of art that is shared with other people</td>
<td>3.44</td>
<td>.981</td>
<td>.395</td>
<td>.223</td>
<td>.103</td>
</tr>
<tr>
<td>11. Creativity that has been revised to incorporate the feedback of others</td>
<td>3.30</td>
<td>.973</td>
<td>.376</td>
<td>.357</td>
<td>.026</td>
</tr>
<tr>
<td>12. A creative hobby encouraged by members of the local community</td>
<td>3.44</td>
<td>.990</td>
<td>.216</td>
<td>.164</td>
<td>.306</td>
</tr>
<tr>
<td>13. An idea that is new to the creator (even if it is not new to anyone else)</td>
<td>3.37</td>
<td>1.051</td>
<td>−.077</td>
<td>.150</td>
<td>.553</td>
</tr>
<tr>
<td>14. A personally meaningful new insight</td>
<td>3.53</td>
<td>1.040</td>
<td>−.069</td>
<td>−.024</td>
<td>.714</td>
</tr>
<tr>
<td>15. Trying to do something creative for the first time</td>
<td>3.56</td>
<td>1.047</td>
<td>−.074</td>
<td>.057</td>
<td>.613</td>
</tr>
<tr>
<td>16. Actively learning something and making new connections</td>
<td>3.65</td>
<td>1.023</td>
<td>.028</td>
<td>.069</td>
<td>.640</td>
</tr>
<tr>
<td>17. The memory of a past event</td>
<td>2.52</td>
<td>1.187</td>
<td>.002</td>
<td>.532</td>
<td>.210</td>
</tr>
<tr>
<td>18. Following directions carefully</td>
<td>2.12</td>
<td>1.145</td>
<td>−.068</td>
<td>.759</td>
<td>−.049</td>
</tr>
<tr>
<td>19. Solving a problem on the basis of a previously taught method</td>
<td>2.68</td>
<td>1.196</td>
<td>.041</td>
<td>.625</td>
<td>.043</td>
</tr>
<tr>
<td>20. Being asked to do one thing and doing another</td>
<td>2.57</td>
<td>1.188</td>
<td>−.002</td>
<td>.441</td>
<td>.105</td>
</tr>
</tbody>
</table>

*Note. n = 682. Maximum likelihood analysis and Promax rotation with Kaiser normalization. Bold pattern matrix coefficients indicate retained items from EFA analysis.*
The four-factor model splits the BPLC factor into Big-C (four items) and Pro/little-c (six items), which is more consistent with the Four C Model of Creativity (Kaufman & Beghetto, 2009). The four-factor model (depicted in Figure 1) was superior to the three-factor model, χ²(129) = 378.956, p < .001, RMSEA = .053; (90% CI = .047, .060); CFI = .927; TLI = .913. Overall, the intercorrelations demonstrated acceptable levels of discriminant validity (ranging from -.136 to .834). However, the correlation between Big-C and Pro/ little-c is dangerously close to the .85 cutoff criterion for identifying problematic discriminant validity (Brown, 2006). As such, the discriminant validity between these two factors should be interpreted with caution and necessitates further empirical validation.

Mean Comparisons

Next, we explored whether respondents viewed each factor as significantly different from each other. To maximize precision, we calculated scale scores using the full sample. Specifically, on the basis of the results from EFA and CFA, we calculated scale scores by averaging responses on items representing each of the four factors: Not-c measured by four items (α = .720), mini-c measured by four items (α = .717), Pro/little-c measured by six items (α = .754), and Big-C measured by four items (α = .785). Results of paired-samples t-tests indicate that respondents viewed each of these factors as hierarchically ordered and significantly different from each other (p < .001, Cohen’s d = .168 to 2.05, average d = 1.10). Specifically, Big-C (M = 4.17, SD = .772) was viewed as the most creative, followed by Pro/little-c (M = 3.65, SD = .654), then mini-c (M = 3.53, SD = .767), and finally Not-c (M = 2.48, SD = .872). The effect size for the difference between Pro/little-c and mini-c was quite small (Cohen’s d = .168) and should therefore be interpreted with caution. Finally, respondents, on average, viewed Big-C, Pro/little-c, and mini-c as creative whereas they tended to view the Not-c as not really creative.

Regression Analysis

Finally, given that the results indicate that respondents were able to differentiate among hierarchical levels of creativity (including not
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Creative), we examined the relationship between these different levels of creativity and the Big Five personality factors. First, we examined the bivariate relationship among items. As displayed in Table 2, and as expected given the results of the CFA, Big-C, Pro/little-c, mini-c, and Not-c were intercorrelated. Moreover, these different levels of creativity were also related to the Big Five personality factors.

We next used multiple regression analysis to examine how the Big Five personality factors predicted the degree to which participants rated Big-C, Pro/little-c, mini-c, and Not-c as being creative. The five personality factors explained a statistically significant amount of variance (20%) in recognition of Big-C, $F(6, 1,305) = 24.76, p < .001$. Two of the Big Five factors, agreeableness ($\beta = .38$, $p < .001$) and openness ($\beta = .14$, $p = .001$), served as unique and statistically significant predictors of Big-C creativity.

With respect to Pro/little-c creativity, the Big Five personality factors explained 10% of variance, $F(6, 1,305) = 24.76, p < .001$. The only factor to serve as a unique and statistically significant predictor was agreeableness ($\beta = .27$, $p < .001$).

The Big Five personality factors also explained a modest but statistically significant amount of variance (6.6%) in recognition of mini-c, $F(6, 1,305) = 15.31, p < .001$. Two of the Big Five factors, agreeableness ($\beta = .16$, $p < .001$) and openness ($\beta = .14$, $p < .001$), served as unique and statistically significant predictors of mini-c creativity.

Finally, the Big Five personality factors also explained a small, but statistically significant amount of variance (1.5%) in Not-c, $F(6, 1,305) = 2.49, p = .003$. The only unique and statistically significant predictor of Not-c was agreeableness ($\beta = -.10$, $p = .004$).

Discussion

This study had two goals. The first goal was aimed at exploring whether people are able to differentiate among different levels of creative development and between noncreative behaviors. The second goal was to examine whether there are individual differences in people who appreciate different levels of creative magnitude. With respect to the first goal of the study, the results of the EFA and CFA indicate that respondents were able to differentiate between different levels of creative development, albeit in a slightly different way than how those levels of creativity have been conceptualized in the Four C model. With respect to the second goal of the study, findings from regression analysis suggest that individual differences play a small but potentially important role in laypeople’s perceptions of creativity. These results are discussed in the subsections that follow.

Perceiving Different Levels of Creativity

The results of the present study suggest that laypeople tend not to simply view something as creative or not, consistent with past work (Kawrowski, 2009). Rather, in alignment with conceptions of creativity offered by some creativity theorists, laypeople tend to have a more differentiated view of creativity. Specifically, participants in this study distinguished descriptions into four different categories (Big-C, Pro/little-c, mini-c, and Not-c). Moreover, each successive level of creativity (from more subjective mini-c creativity to clear-cut Big-C creativity) was viewed as incrementally more creative than the former level.

These findings are in alignment with the longstanding view held by creativity research psychologists who have described creativity from a developmental perspective (Cohen, 1989; Kaufman & Beghetto, 2009; Stein, 1953; Vygotsky, 1967/2004). Specifically, research psychologists who view creativity from a developmental perspective have posited different levels or categories of creativity, including a subjective (or mini-c) level of creativity, which does not require an external frame of reference for judging whether an idea, insight, or interpretation is creative. Indeed, as Vygotsky (1967/2004) has asserted, any human act that results in something new can be considered a creative act “regardless of whether what is created is a physical object or some mental or emotional construction that lives within the person who created it and is known only to him [or her]” (p. 7).

This distinction is important for at least two reasons. First, it helps ensure that creative potential is not overlooked. For instance, the new and personally meaningful insights that children and novices have while still learning a domain can serve as a signifier of creative potential that can be developed into larger-c creative accomplishments. Second, recognition of mini-c creativity helps ensure that the internal and more subjective aspects of creativity are recognized as a catalyst for creative achievement. Indeed, from the Four C perspective there is no little-c, Pro-c, or Big-C without mini-c. The difference between more accomplished creators and novices is that more accomplished creators have the domain knowledge, expertise, and ability necessary to turn mini-c insights into creative achievements. In this way, mini-c serves as the genesis for recognizable forms of creative achievement (Beghetto & Kaufman, 2007; Kaufman & Beghetto, 2009).

The results of the present study also suggest that laypeople not only tend to recognize mini-c as a distinct category of creativity but (also) recognize differences in the higher forms of creative expression (albeit in a somewhat less distinct way than as specified by the Four C model). Specifically, the Four C model posits more fine-grained distinctions between Big-C, Pro-c, and little-c, whereas our results indicate that laypeople view these categories at a larger grain size. Laypeople tended to view aspects of Pro-c and little-c as somewhat indistinguishable and tended to view a strong association between Big-C and Pro/little-c creativity.

Why did Pro-c and little-c merge together? One reason is that the sample comprised college students. The main distinction between Pro-c and little-c, according to the Four C model, is the role of deliberate practice and expertise (Kaufman & Beghetto, 2009). It typically takes 10 years to become an expert (Hayes, 1989); advanced classes in which students actively experiment with new ideas could be included in this process. Depending on their grade level and school engagement, many students in our sample may have been well on their way to becoming an expert themselves. Therefore, Pro-c-level accomplishments may have seemed less remote and distinct from more everyday creative work.

3 Given the large sample size, we used a more conservative $p$ value ($p < .01$) for interpreting $\beta$ as significant. Also, because of the disproportionate number of female respondents, we included a dummy-coded gender variable (1 = male) as a control in the regression models.
Descriptive Statistics and Bivariate Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not-c</td>
<td>2.48</td>
<td>.87</td>
<td>—</td>
<td>.376*</td>
<td>.206*</td>
<td>—</td>
<td>.115*</td>
<td>.033</td>
<td>—</td>
<td>.048</td>
<td>—</td>
</tr>
<tr>
<td>2. Mini-c</td>
<td>3.53</td>
<td>.77</td>
<td>—</td>
<td>.390*</td>
<td>.291*</td>
<td>.104*</td>
<td>.214*</td>
<td>.080*</td>
<td>.001</td>
<td>.195*</td>
<td>—</td>
</tr>
<tr>
<td>3. Pro/little-c</td>
<td>3.65</td>
<td>.65</td>
<td>—</td>
<td>.627*</td>
<td>.067</td>
<td>.308*</td>
<td>.156*</td>
<td>.004</td>
<td>—</td>
<td>.151*</td>
<td>—</td>
</tr>
<tr>
<td>4. Big-C</td>
<td>4.17</td>
<td>.77</td>
<td>—</td>
<td>.082*</td>
<td>.431*</td>
<td>.206*</td>
<td>.062</td>
<td>.275*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Extraversion</td>
<td>3.20</td>
<td>.75</td>
<td>—</td>
<td>—</td>
<td>.226*</td>
<td>.070</td>
<td>.188</td>
<td>.292*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Agreeableness</td>
<td>4.00</td>
<td>.61</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.330*</td>
<td>.137*</td>
<td>.367*</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Conscientious</td>
<td>3.58</td>
<td>.62</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>.193*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>8. Emotional Stability</td>
<td>3.13</td>
<td>.73</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9. Openness</td>
<td>3.51</td>
<td>.56</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
</tbody>
</table>

Note. N = 1,364.

*p < .001.

However, it is important to note that our results suggest that respondents did tend to view these different categories in a hierarchical fashion, which is in alignment with what is posited by the Four C model (i.e., Big-C as more creative than Pro/little-c, Pro/little-c as more creative than mini-c; mini-c as more creative than Not-c, and Not-c as not creative).

Individual Differences

People who viewed Big-C as creative were more likely to be agreeable and open. Given that most Big-C items were clearly creative, this may simply indicate that agreeable people try to follow a task’s requirement better (or give higher scores to everything). Indeed, agreeableness was also a predictor of viewing Pro/little-c and mini-c as creative. People who are open to new experiences tend to also be creative (e.g., King, Walker, & Broyles, 1996; McCrae, 1987; Silvia, Kaufman, & Pretz, 2009; Silvia, Nusbaum, Berg, Martin, & O’Connor, 2009). Such people may be more likely to be interested in creativity and have a stronger opinion on what is creative.

The finding that people who rated Not-c as more creative were more disagreeable may also be interpreted in the lens of the actual task. Given that the items on the Not-c factor are in most cases clearly not creative, participants who nonetheless have high scores may better understand the creative process and therefore recognize how important mini-c can be.

Limitations

Several important limitations should be considered when interpreting the findings of this study. First, the results may be limited by the measurement instruments used, which relied on self-report surveys. Specifically, subsequent research (using various methods and measures) is needed to verify the consistency and accuracy of the present findings. For example, subsequent studies might include a combination of interviews, observations, and survey measures that can provide more nuanced insights into the relationship among participants’ beliefs, specific creative behaviors, and assessments of those behaviors.

Moreover, given that the current sample had proportionally more females and Hispanic Americans that in most research studies, follow-up studies will need to sample within additional settings across different populations to establish the generalizability of the present findings across. One possible follow-up could be to explore cross-cultural differences in these implicit beliefs. An additional possibility would be to use a nonstudent sample.

Even with these limitations, the findings from this study offer new and potentially important insights into the laypersons’ perceptions of creativity. The findings also provide guidance for subsequent research aimed at understanding how implicit beliefs connect with actual creative performance.

Conclusions and Future Directions

The results of this exploratory study provide initial evidence that people can recognize and differentiate levels of creativity. Specifically, this sample of college students could distinguish Not-c (not creative), mini-c, a blend of Pro-c and little-c, and Big-C. As such, this study provides an empirical basis for the theoretical assertion that mini-c creativity is viewed as a unique and legitimate form of creativity. Additional work is needed to understand whether and how laypeople might benefit from viewing creativity across a broader spectrum (such as that proffered by the Four C Model of Creativity). One potential benefit of doing so is that it may help people locate themselves on a developmental trajectory, thus better understanding the needed further requirements to enhance their creative abilities within their chosen domain.

In addition, understanding how people perceive and appreciate different magnitudes of creative accomplishment gives insight into how the public values and judges creativity. Mini-c was its own
factor and was distinguishable from Not-c, which indicates at least some common appreciation for the personal insights and smaller delights that come with the creative process. In addition, many studies have found differences between how experts and novices evaluate creative work (Kaufman & Baer, 2012; Kaufman, Niu, Sexton, & Cole, 2010; Lee, Lee, & Young, 2005). This study’s finding of laypeople’s perception of Pro-c and little-c as being overlapping constructs may offer insight into the cause of these differences. Additional studies that explore creativity perceptions by domain and across laypeople and domain experts may shed further light on this issue.

Future work could see to what extent leading creativity theories are implicitly understood by laypeople. The ultimate goal of much of psychological research is to make some type of impact on the world; however, scholars rarely attempt to find out what aspects of their work may be more or less instinctually comprehensible. Given that nonresearchers write most current bestsellers on creativity, this question is not an idle one. Obviously, data and explicit theories need not be interpreted via the lens of the layperson, but such knowledge can only help.

References


