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Flexible Humor Styles and the Creative Mind: Using a Typological Approach to Investigate the Relationship Between Humor Styles and Creativity

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Previous studies have found little evidence of a link between humor styles and creativity because the typological approach to humor styles has not been applied. Therefore, our study aimed to use the typological approach to humor styles to investigate the relationship between different humor styles and creativity. Two competing hypotheses were examined: the positivity perspective suggests that positive humor endorsers are more creative, whereas the intrapersonal variability perspective suggests that general humor endorsers are more creative. A total of 1,252 Mandarin young adolescents participated in the current study. Via a cluster analysis, they were classified into 4 humor types: general humor endorser, humor denier, positive humor endorser, and negative humor endorser. Importantly, the results revealed that general humor endorsers outperformed the other 3 groups in both creative potential and creative attitudes. The findings supported the intrapersonal variability perspective of creativity: individuals who hold different or opposing elements within themselves have greater creativity. Implications for research on humor types and creativity are discussed.

Keywords: creativity, general humor endorser, humor types, Mandarin

Previous studies have linked humor and creativity based on their similar cognitive processes. For instance, they require the resolution of incongruous information (Kozbelt & Nishioka, 2010; Murdock & Ganim, 1993; Wyer & Collins, 1992), and they are correlated with superior verbal ability (Feingold & Mazzella, 1991; Greengross & Miller, 2011). In addition, research studies have revealed that watching humor films or living in a humorous environment could facilitate children’s creative performance (Ziv, 1976, 1983), and the effect of humor on creativity could also extend to adults (Fernández-Abascal & Díaz, 2013; Filipowicz, 2006).

However, most of these studies as mentioned above defined humor as a unidimensional cognitive ability or an affective state, ignoring the possibility that different humor styles can influence creativity differently. In line with this perspective, Martin, Puhlik-Doris, Larsen, Gray, and Weir (2003) defined four humor styles: affiliative, aggressive, self-enhancing, and self-defeating humor. Therefore, Chen, Su, and Ye (2011) recruited 710 young adolescents and investigated their humor styles (Martin et al., 2003), creative potential (as measured by the modified Torrance Test of Creative Thinking in Chinese), and creative attitudes (as measured by the Exercise in Divergent Feeling; Williams, 1980). Unfortunately, none of the humor styles could predict creative potential or creative attitudes. This finding seems to show that humor style has little effect on creative potential or creative attitudes. However, recent studies have argued that using simple correlations or regression analysis to investigate the relationships between humor styles and other outcome variables could eliminate certain information, ignoring the individual differences between style profiles (Gallo- way, 2010; Leist & Müller, 2013). Therefore, a typological ap-
proach with a cluster analysis could capture and represent the distinct characteristics of different humor styles more completely than the traditional correlational paradigm. Drawing on the typological perspective of humor styles, the present study aimed to investigate different types of humor styles and creative performance.

**Humor Types and Their Possible Link to Creativity**

Martin et al. (2003) conducted a systematic review on humor styles and used a conceptual framework based on two underlying dimensions to identify four humor styles. The first dimension is self- versus other-oriented, and the other dimension is positive (or benevolent) versus negative (or detrimental). Therefore, self-enhancing humor is self-oriented and positive, affiliative humor is other-oriented and positive, aggressive humor is self-oriented and negative, and self-defeating humor is other-oriented and negative. Previous studies have consistently shown that positive humor styles (self-enhancing and affiliative) can positively predict personal well-being and relationship quality, whereas negative humor styles (self-defeating and aggression) negatively predict well-being and relationship quality (Dyck & Holtzman, 2013; Martin et al., 2003; Yip & Martin, 2006). In addition, the adaptive effect of self-enhancing and affiliative humor and the maladaptive effect of self-defeating and aggressive humor have been found in different cultures and nations, including Lebanon (Kazarian & Martin, 2004; Taher, Kazarian, & Martin, 2008), Taiwan (Chen, Chen, Cho, & Martin, 2011), and Mainland China (Cheung & Yue, 2013; Zhao, Kong, & Wang, 2012).

However, the correlational analysis of humor styles is less fruitful than the typological approach. The typological approach means to investigate those underlying combinations from different humor styles. Therefore, Galloway (2010) performed a cluster analysis using the Humor Styles Questionnaire by Martin et al. (2003) and revealed four types of humor styles. The first type contained general humor endorsers who used all four humor styles at an above-average level compared with the other participants. The second type was below average for all four humor styles and were therefore identified as humor deniers. The third type participants were identified as positive humor endorsers because they used the two positive humor styles (self-enhancing and affiliative humor) more than average and the two negative humor styles (self-defeating and aggressive) less than average. The fourth type participants were identified as negative humor endorsers because they used the negative styles more than average and the positive styles less than average. Another study conducted by Leist and Müller (2013) also replicated three types of humor styles: general humor endorsers, humor deniers, and positive humor endorsers (which they called humor enhancers). They found that positive humor endorsers had the highest well-being and self-esteem, whereas humor deniers had the lowest and general humor endorsers fell in between.

Based on the recent findings related to humor styles, two possible hypotheses could explain the relationship between humor styles and creativity. First, empirical studies have consistently revealed that inducing a positive affect can improve creative performance (for a review, see Baas, De Dreu, & Nijstad, 2008). In addition, Fredrickson and her colleagues proposed the broaden-and-build theory to explain the link between positive affect and creativity: the influential power of both trait and state positive affect can broaden an individual’s cognitive scope and capacity and hence increase an individual’s psychological resources to act creatively (Fredrickson, 2001, 2013; Fredrickson & Branigan, 2005). Although positive humor styles are not equivalent to positive affect, empirical studies have consistently found that positive humor styles are positively related to positive affect and negatively related to negative affect, whereas negative humor styles are positively related to negative affect and negatively related to positive affect (Kazarian & Martin, 2004; Martin et al., 2003; Yip & Martin, 2006). Therefore, the positivity-to-creativity perspective predicted that positive humor endorsers might have better creative performance because they experience more positive affect and engage in more positive social behaviors than individuals with other humor styles (Leist & Müller, 2013).

On the other hand, another hypothesis suggests that intrapersonal variability can lead to creativity, that is, individuals who hold opposing or conflicting traits performed more creatively than those who hold relatively stable or consistent traits (Barron & Harrison, 1981). In other words, as indicated by Csikszentmihalyi (1996), complex personalities enhanced creativity. Furthermore, a recent study conducted by Kim, Zeppenfeld, and Cohen (2013) showed that individuals who experienced an internal conflict with a personal taboo performed more creatively through the process of sublimation. Therefore, the intrapersonal variability or conflicting self-concept perspective predicted that general humor endorsers might perform more creatively because they hold multiple humor styles, including conflicting or even opposing styles, for instance, self-defeating humor (self-oriented plus negative) compared with affiliative humor (other-oriented plus positive), or self-enhancing humor (self-oriented plus positive) compared with aggressive humor (other-oriented plus negative).

**Overview of the Present Study**

Based on the previous finding that humor styles had little to no effect on creativity, the present study aimed to use a typological approach to identify different humor types and to investigate their impacts on creativity. We will investigate the relationship among four humor styles (i.e., affiliative humor, self-enhancing humor, aggressive humor, and self-defeating humor) with creative performance via the correlational analysis, and then compare individuals’ creative performance based on their humor types of cluster analysis (i.e., general humor endorsers, humor deniers, positive humor endorsers, and negative humor endorsers). Therefore, our first aim was to replicate the previous findings on humor styles clusters (Galloway, 2010; Leist & Müller, 2013). We hypothesized that there would be three or four humor types, including general humor endorsers, humor deniers, positive humor endorsers, and negative humor endorsers. Two competing possible relationships between humor types and creativity were examined. The positivity perspective suggests that positive humor endorsers are the most creative, whereas the intrapersonal variability perspective suggests that general humor endorsers are the most creative.

**Method**

**Participants**

Through the child and family study of the National Science Council and the Ministry of Education in Taiwan, 1,252 young
adolescents were recruited from 22 junior high schools. They ranged from grade seven to grade nine, with a mean age of 13.01, SD = 0.78. Of the participants, 49% were female, and all of them were Chinese. Each young adolescent provided information about demographics, humor styles, creative potential, and creative attitudes as described below.

Measurement

Humor Styles Questionnaire. Martin et al. (2003) developed 32 items to assess four styles of humor (eight items for each style): affiliative (e.g., I do not have to work very hard at making other people laugh, I seem to be a naturally humorous person), self-enhancing (e.g., If I am feeling depressed, I can usually cheer myself up with humor), aggressive (e.g., If someone makes a mistake, I will often tease them about it), and self-defeating humor (e.g., I often try to make people like or accept me more by saying something funny about my own weaknesses, blunders, or faults). The items are scored on a 7-point scale ranging from 1 = completely disagree to 7 = completely agree. The Chinese version, which has the same factor structure, was translated by Chan et al. (2011) and demonstrated good test-rest reliability after three weeks (rs = .83 – .84, ps < .001) and acceptable internal consistency (Cronbach’s α = .73 – .88). In addition, consistent with the results obtained by Martin et al. (2003), affiliative and self-enhancing humor were positively correlated with extraversion and openness to experience, whereas aggressive and self-defeating humor were negatively correlated with emotional stability and conscientiousness (Chan et al., 2011). In addition, several studies have been revealed that HSQ was less influenced by the Chinese culture and participants’ age, and also widely applied in Chinese society (Cheung & Yue, 2013; Zhao, Kong, & Wang, 2012). The present study also showed acceptable internal consistency for each scale (Cronbach’s αs = .72 – .82), as shown in Table 1.

New version of the Chinese Creative Thinking Test. We used the new version of the Chinese Creative Thinking Test to assess the young adolescents’ creative potential. This creative potential test was conducted by Wu et al. (1998) based on the Torrance Creativity Thinking Test – Figural (Torrance, 1974) and modified for a Chinese version, and has been widely used in Chinese society for identifying creative students (Wu & Albanese, 2010). We used this figure-drawing test rather than verbal based test because previous studies revealed that figure-drawing test has been shown to be less biased in terms of language and verbal ability (Kim, 2006; Torrance, 1977). The test included 27 versions of different size and boldface of the same Chinese character “X” (means human; see Figure 1). The participants were given exactly 10 min to complete as many drawings as possible. Four indexes were assessed: (a) fluency (the number of responses), (b) flexibility (the number of categories of responses), (c) originality (unusual responses), and (d) elaboration (the number of added ideas). The scores for the new version of the Chinese Creative Thinking Test were derived from the standardized grading norms by Wu et al. (1998) and showed high test–retest reliability after four months (rs = .42 – .60, ps < .001) and high interrater reliability (rs > .94, ps < .001). In addition, these subscales were positively correlated with the Torrance Creativity Thinking Test – Figural (rs = .39 – .75, ps < .001) in a sample of 2,300 child and adult participants (Wu et al., 1998). The present study also found acceptable internal consistency for each scale (correlations between two independent rater = .85 – .98), as shown in Table 1.

Exercise in Divergent Feeling. We used the Exercise in Divergent Feeling to assess the young adolescents’ creative attitudes.

Table 1
Descriptive Statistics and Correlations Between the Measured Variables (N = 1,252)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
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<th>9</th>
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<tbody>
<tr>
<td>Humor styles</td>
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<tr>
<td>1. Affiliative</td>
<td>.79</td>
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<tr>
<td>2. Self-enhancing</td>
<td>.35**</td>
<td>.82</td>
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<tr>
<td>3. Aggressive</td>
<td>−.08</td>
<td>−.12**</td>
<td>.80</td>
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<tr>
<td>4. Self-defeating</td>
<td>.10**</td>
<td>.11**</td>
<td>.18**</td>
<td>.72</td>
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<tr>
<td>New version of the Chinese Creative Thinking Test</td>
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<tr>
<td>5. Fluency</td>
<td>.11**</td>
<td>.10**</td>
<td>−.05</td>
<td>.07*</td>
<td>.98</td>
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<tr>
<td>6. Flexibility</td>
<td>.13**</td>
<td>.12**</td>
<td>−.05</td>
<td>.09*</td>
<td>.75**</td>
<td>.97</td>
<td></td>
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<tr>
<td>7. Originality</td>
<td>.05</td>
<td>.09*</td>
<td>−.06*</td>
<td>.10**</td>
<td>.70**</td>
<td>.58**</td>
<td>.94</td>
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<tr>
<td>8. Elaboration</td>
<td>.02</td>
<td>.05</td>
<td>−.08*</td>
<td>−.03</td>
<td>.28**</td>
<td>.23**</td>
<td>.32**</td>
<td>.85</td>
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<td>Exercise in Divergent Feeling</td>
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<tr>
<td>9. Curiosity</td>
<td>.14**</td>
<td>.19**</td>
<td>−.06*</td>
<td>.05</td>
<td>.16**</td>
<td>.15**</td>
<td>.13**</td>
<td>.06*</td>
<td>.80</td>
<td></td>
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<tr>
<td>10. Imagination</td>
<td>.14**</td>
<td>.22**</td>
<td>−.06*</td>
<td>.15**</td>
<td>.21**</td>
<td>.22**</td>
<td>.18**</td>
<td>.08*</td>
<td>.56**</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Complexity</td>
<td>.19**</td>
<td>.22**</td>
<td>−.07*</td>
<td>.09*</td>
<td>.17**</td>
<td>.17**</td>
<td>.15**</td>
<td>.07*</td>
<td>.48**</td>
<td>.54**</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>12. Risk taking</td>
<td>.16**</td>
<td>.22**</td>
<td>−.10**</td>
<td>.05</td>
<td>.15**</td>
<td>.17**</td>
<td>.13**</td>
<td>.08*</td>
<td>.47**</td>
<td>.52**</td>
<td>.52**</td>
<td>.65</td>
</tr>
<tr>
<td>Mean</td>
<td>5.24</td>
<td>4.51</td>
<td>3.21</td>
<td>3.35</td>
<td>12.73</td>
<td>8.65</td>
<td>9.07</td>
<td>3.82</td>
<td>3.52</td>
<td>3.22</td>
<td>3.52</td>
<td>3.53</td>
</tr>
<tr>
<td>SD</td>
<td>1.06</td>
<td>1.03</td>
<td>0.95</td>
<td>1.05</td>
<td>5.58</td>
<td>3.57</td>
<td>6.14</td>
<td>4.41</td>
<td>0.73</td>
<td>0.73</td>
<td>0.58</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Note. Diagonals are Cronbach’s α coefficients for the Humor styles and Exercise in Divergent Feeling, and correlations between two independent raters for the new version of the Chinese Creative Thinking Test.

*p < .05. **p < .01.
Williams (1980) created the Exercise in Divergent Feeling to assess four types of creative attitudes: curiosity (13 items; e.g., I would like to know what other people think), imagination (13 items; e.g., If the final page of a storybook is missing, I will make up the story’s ending myself), complexity (12 items; e.g., I like unusual things), and risk taking (12 items; e.g., Trying a new game or activity is an interesting thing). The items are scored on a 5-point scale ranging from 1 = completely disagree to 5 = completely agree. This scale is a commonly used test for assessing creative attitude (Claxton, Pannells, & Rhoads, 2005; Cropy, 2000). The Chinese translation was created by Lin and Wang (1994) that established its good internal consistency (Cronbach’s α = .77 – .88) and test–retest reliability for young adolescents after three months (r = .49 – .81; p < .001), and showed good predicted value for identifying creative students. A recent study conducted by Chan, Chen, and Lavallee (2013) also revealed good reliability and validity in Chinese participants. The present study also found acceptable internal consistency for each scale (Cronbach’s α = .65 – .81), as shown in Table 1.

Results

We first examined correlations of all measures, and focused on the relationships among four humor styles (i.e., affiliative humor, self-enhancing humor, aggressive humor, and self-defeating humor) with creative potential and creative attitude. Second, we investigated different humor types (Galloway, 2010; i.e., general humor endorsers, humor deniers, positive humor endorsers, and negative humor endorsers) via cluster analysis, and then compared the creative potential and creative attitude based on different humor types.

The means, standard deviations, and correlations between the measurement variables are presented in Table 1. With regard to creative potential, the correlational analysis revealed that the strongest relationship was observed between the affiliative humor style and flexibility, r = .13, p < .001. Most of the correlations were low or nonsignificant (rs = −.08 – .13). On the other hand, creative attitudes and affiliative and self-enhancing humor were positively correlated with all of the subscales on the Exercise in Divergent Feeling, whereas aggressive humor was negatively correlated with all of the subscales on the Exercise in Divergent Feeling. Self-defeating humor was positively correlated with the imagination and complexity subscales. In addition, eight multiple regressions with humor style as independent variables, and creative potential and attitudes as dependent variables are presented in Table 2. Corresponding to Chen et al.’s (2011) findings, humor styles had little effect on creative potential (all absolute values of β less than .1) and a moderate effect on creative attitudes. Therefore, the results provided possible line to investigate the link between humor types and creativity for further analysis.

Cluster Analysis of the Humor Styles Questionnaire

As suggested in previous studies using the Humor Styles Questionnaire in cluster analyses (Galloway, 2010; Leist & Müller, 2013), we standardized the humor style scales with z-scores and then conducted a k-means cluster analysis to identify categories of individual humor styles. Consistent with Galloway’s (2010) findings, four clusters were revealed: general humor endorsers (N = 266, 21.4%, high in each humor style), humor deniers (N = 257, 20.5%, low in each humor style), positive humor endorsers (N = 337, 26.9%, high in the self-enhancing and affiliative humor styles, but low in the aggressive and self-defeating humor styles), and negative humor endorsers (N = 392, 31.3%, high in the aggressive and self-defeating humor styles, but low in the self-enhancing and affiliative humor styles), as shown in Figure 2. The clusters did not differ in age, F(3, 1248) = 1.98, p = .12, but they did differ in gender composition, χ² = 28.45, df = 3, p < .001. In alignment with Galloway’s (2010) findings, general humor deniers (60% female) and positive humor endorsers (57% female) had greater proportions of females, whereas general humor endorsers (47% female) and negative humor endorsers (42% female) had lower proportions of females. However, gender and age did not interact with the other variables. When gender and age were included as covariates in subsequent analyses, the results did not change. Therefore, we omitted gender and age from subsequent analyses.

Humor Types and Creative Potential

Four analysis of variance (ANOVAs) to assess creativity potential using each index from the new version of the Chinese Creative

<table>
<thead>
<tr>
<th>IV/DV</th>
<th>New version of the Chinese Creative Thinking Test</th>
<th>Exercise in Divergent Feeling</th>
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<tbody>
<tr>
<td></td>
<td>Fluency</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Affiliative</td>
<td>.07*</td>
<td>.09*</td>
</tr>
<tr>
<td>Self-enhancing</td>
<td>.07*</td>
<td>.08*</td>
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<tr>
<td>Aggressive</td>
<td>.05</td>
<td>.05</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>.07*</td>
<td>.08*</td>
</tr>
<tr>
<td>F</td>
<td>7.09**</td>
<td>9.41**</td>
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<tr>
<td>R²</td>
<td>.022</td>
<td>.029</td>
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<tr>
<td>Adj R²</td>
<td>.019</td>
<td>.026</td>
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</table>

*p < .05, **p < .01.
Thinking Test. Bonferroni post hoc tests with $\alpha = .05$ were used to correct the error probability for the number of compared groups, as indicated in Table 3. The results revealed group differences in fluency, $F(3, 1248) = 35.86, p < .001, \eta^2_g = .08$, flexibility, $F(3, 1248) = 30.06, p < .001, \eta^2_g = .07$, originality, $F(3, 1248) = 35.31, p < .001, \eta^2_g = .08$, and elaboration, $F(3, 1248) = 17.78, p < .001, \eta^2_g = .04$. The post hoc analysis showed general humor endorsers outperformed the other three groups on all four indexes; the other three groups did not differ with regard to fluency, flexibility, or originality. For elaboration only, the post hoc analysis revealed that positive humor endorsers performed better than negative humor endorsers. The findings on the impact of humor types on creative potential supported the intrapersonal variability perspective: general humor endorsers outperformed the other three types.

**Humor Types and Creative Attitudes**

We conducted four ANOVAs to assess creative attitudes using each subscale on the Exercise in Divergent Feeling. Bonferroni post hoc tests with $\alpha = .05$ were used to correct the error probability for the number of compared groups, as indicated in Table 3. The results revealed group differences in curiosity, $F(3, 1248) = 7.54, p < .001, \eta^2_g = .02$. The post hoc analysis showed that the general humor endorsers had higher curiosity scores than the humor deniers and the negative endorsers, whereas the humor deniers, the positive humor endorsers, and the negative endorsers did not differ from each other. With regard to imagination, there were significant group differences, $F(3, 1248) = 15.85, p < .001, \eta^2_g = .04$. The post hoc analysis showed that the general humor endorsers had higher imagination scores than the other three groups, and the other three groups did not differ from each other. With regard to complexity, significant group differences were revealed, $F(3, 1248) = 18.13, p < .001, \eta^2_g = .04$. The post hoc analysis showed that the general humor endorsers had higher complexity scores than the other three groups, and the positive humor endorsers had higher complexity scores than the negative humor endorsers. The humor deniers did not differ from the positive humor endorsers or the negative humor endorsers. With regard to risk taking, significant group differences were revealed, $F(3, 1248) = 18.19, p < .001, \eta^2_g = .04$. The post hoc analysis showed that the general humor endorsers had higher risk-taking scores than the other three groups, and the positive humor endorsers had higher risk-taking scores than the humor deniers and the negative humor endorsers. However, the humor deniers and the negative humor endorsers did not differ from each other.

The findings on the relationship between humor styles and creative attitudes also supported the intrapersonal variability perspective: the general humor endorsers had higher creative attitude scores than the other three types. However, the findings partially supported the positivity perspective on creativity: the positive humor endorsers had the second-highest scores for creative attitudes. We will illustrate this result in more detail in the discussion section.

**Discussion**

A relationship between humor styles and creativity was revealed using a typological approach. Previous research studies have mainly focused on the direct effect of humor styles on creativity, finding little connection between humor styles and creativity. Using the recent humor styles typology approach (Galloway, 2010; Leist & Müller, 2013), we first confirmed four types of humor styles in a large sample of young adolescents, including general humor endorsers, humor deniers, positive humor endorsers, and

<table>
<thead>
<tr>
<th>Measure</th>
<th>General humor endorsers</th>
<th>Humor deniers</th>
<th>Positive humor endorsers</th>
<th>Negative humor endorsers</th>
</tr>
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<tbody>
<tr>
<td><strong>Chinese Creative Thinking Test</strong></td>
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</tr>
<tr>
<td>Fluency</td>
<td>15.79 (5.85)</td>
<td>12.24 (5.74)</td>
<td>12.12 (5.04)</td>
<td>11.59 (5.02)</td>
</tr>
<tr>
<td>Flexibility</td>
<td>10.44 (3.61)</td>
<td>8.18 (3.62)</td>
<td>8.44 (3.33)</td>
<td>7.99 (3.30)</td>
</tr>
<tr>
<td>Originality</td>
<td>12.42 (7.14)</td>
<td>8.69 (6.00)</td>
<td>8.05 (5.36)</td>
<td>8.02 (5.42)</td>
</tr>
<tr>
<td>Elaboration</td>
<td>5.44 (5.54)</td>
<td>3.94 (4.60)</td>
<td>3.43 (3.89)</td>
<td>3.00 (3.50)</td>
</tr>
<tr>
<td><strong>Exercise in Divergent thinking</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curiosity</td>
<td>3.69 (0.72)</td>
<td>3.42 (0.70)</td>
<td>3.55 (0.77)</td>
<td>3.45 (0.71)</td>
</tr>
<tr>
<td>Imagination</td>
<td>3.48 (0.70)</td>
<td>3.14 (0.77)</td>
<td>3.22 (0.72)</td>
<td>3.11 (0.70)</td>
</tr>
<tr>
<td>Complexity</td>
<td>3.72 (0.52)</td>
<td>3.49 (0.54)</td>
<td>3.57 (0.53)</td>
<td>3.41 (0.55)</td>
</tr>
<tr>
<td>Risk taking</td>
<td>3.73 (0.56)</td>
<td>3.41 (0.57)</td>
<td>3.56 (0.60)</td>
<td>3.44 (0.55)</td>
</tr>
</tbody>
</table>

*Note.* The standard deviations are provided in parentheses.
negative humor endorsers. Second, our study revealed that general humor endorsers outperformed the other three groups in both creative potential and creative attitudes. This finding supported the intrapersonal variability perspective of creativity (Barron & Harrington, 1981; Csikszentmihalyi, 1996), which holds that opposing elements within individuals could have beneficial effects on creativity. On the other hand, the positivity perspective suggested that positive traits or attitudes could also influence creativity. In our study on creative potential, the positive humor endorsers only performed better than the negative humor endorsers on the elaboration dimension. In terms of creative attitudes, the positive humor endorsers had the second-highest scores, above the humor deniers and the negative humor endorsers. Although the positive humor endorsers had better well-being than the individuals with other humor styles (Galloway, 2010; Leist & Müller, 2013), our findings showed that the effect on creativity mainly appeared in creative attitudes rather than in creative potential. Creativity seems to be more strongly related to an internal conflict state with multiple elements than a positive state. In other words, diverse or flexible styles could be more essential for creativity than positive mood or traits.

General Humor Endorsers: Self-Integration and Psychological Flexibility

In addition, based on theory, the effect of the humor endorser style on creativity could also be linked to self-integration and psychological flexibility. Self-integration means that individuals can hold positive and negative self-identities or self-knowledge spontaneously (e.g., I am a bad person and also a good person) within themselves (for reviews, see Weinstein, Przybylski, & Ryan, 2013; Zeigler-Hill & Showers, 2007). Compared with self-compartmentalization, which entails holding either positive or negative self-identities or self-knowledge, integration is associated with better adjustment to stressful events (Zeigler-Hill & Showers, 2007), more intrinsic motivation, and less defensiveness (Weinstein, Deci, & Ryan, 2011). Interestingly, a mind that adapts to a changeable world and intrinsic motivation for engaging in life activities are central elements for enhancing creativity (de Jesus, Rus, Lens, & Imaginário, 2013; Kaufman & Beghetto, 2009). Although general humor endorsers hold different or even opposing humor styles, they may experience integration rather than internal conflicts. Therefore, this self-integration process enables them to act creatively.

On the other hand, the psychological flexibility perspective proposed that individuals who hold multiple strategies or attitudes and can switch or shift based on various situational demands demonstrate better psychological adjustment than those who use few strategies or fixed simple strategies (Cheng, 2001; Kashdan & Rottenberg, 2010). These shifting and switching processes play an important role in increasing creativity (Barron & Harrington, 1981; Runco, 2004). Therefore, the general humor endorsers, with various humor styles, can use different humor styles in different situations, shifting and switching processes that enhance creativity.

In summary, the general humor endorser, self-integration, psychological flexibility, and creativity could be related. In addition, self-integration and psychological flexibility might account for the relationship between the general humor endorser style and creativity. Future studies are needed to test these ideas and to understand the relationship between humor styles and creativity more clearly.

Limitations and Future Research

Although the present study found that general humor endorsers had both better creative potential and more creative attitudes than those with other humor styles, some limitations in our study underscore the importance of future investigations. Our study mainly focused on standardized measurements for measuring creative potential and creative attitudes. However, these paper-pencil tasks might not fully capture real-world creative performance. Therefore, a longitudinal follow-up investigation on the actual creative performance of these young adolescents could reveal more detail about how general humor endorsers use their multiple styles to enhance their creativity. In addition, other forms of creativity tests could be included in further studies. For instance, research conducted by Lin, Hsu, Chen, and Wang (2012) showed that gender and personality traits could relate with different creativity measurements, specifically that females had superior performance on divergent thinking test than males, whereas males had superior performance on insight problem test than females. Therefore, further studies could also test the relationships between humor types with other forms of creativity measurements.

In sum, our findings extended the research on humor styles and creativity from a correlational approach to a cluster approach with a large sample of young adolescents, and revealed that the general humor endorser has a beneficial effect on both creative potential and creative attitudes in which supported the intrapersonal variability perspective on creativity. Further studies could investigate the impact of humor types on creativity based on different forms of creative performance to provide a more global picture of their relationships and underlying mechanisms.

References


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