Creative Personality Inventory

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Basic theory; Until now the creativity is still an aspect that will determine a person's success, both in learning, business and even determine the psychological well-being of a person (Althuizen, Wierenga, & Rossiter, 2010; Audia and Goncalo, 2007; Rauch and Frese, 2007; Tan & Hashim, 2009 ; Zinc, Aun, & May, 2016). Therefore it is necessary to identify creative people from an early age. Constraints in the field of creativity tests are still carried out by a limited circle who has the authorize. Researchers want any expansion of the means of identifying people based creative school. This inventory made to help identify creative people in high school. Efforts identification can do by a school counselor by using this inventory. So school counselors can make the program guidance and counseling services for students based on the results of such identification.

The Creative Personality Inventory made from a definition of creativity by Runco. Runco (2004) defines "Creativity is capacity to develop novel and useful ideas, behaviors, or products, and tends to be seen as a complex capacity bearing on a mix of individual, situational, and cultural variables" (quoted in Martinsen, 2011), The standard definition of creativity has at least two elements namely the originality and effectiveness. Originality or authenticity often just labeled others as indications show the authenticity eg novelty, unique, and unusual. While Effective or effectiveness is indicative of something of value used also by other labels as usefulness, appropriateness, adaptability (Rubenson, 1991; Rubenson & Runco, 1992, 1995; Sternberg & Lubart, 1991; Runco and Jaeger, 2012).

Many experts admit there are two viewpoints on the creative dichotomy that is the perspective of cognitive and non-cognitive perspective (affective, personality, social, conative, economic) (Runco and Jaeger, 2012). This inventory made to identify creativity using the perspective of personality. The define Personality our research as "a pattern of characteristic thoughts, feelings, and behaviors, that distinguishes one person from another and that persists over time and situations" (Phares, 1986, p. 4 in Runco, 2014, p. 280). Phares adds "the critical feature is the unique way in which each person combines these traits" (Phares, 1986, p. 6; in Runco, 2014, p. 280). Added also by Runco "This may explain why not every creative person shows exactly the same traits" (Runco, 2014, p. 280). From the description above makes clear that creativity can be attached to a person's personality. So as to identify creative people can trace through approach traits. You do this by looking at the characteristics that seem and settle on self-person.

Personality characteristics of creative individuals includes broad intelligence , openness to experience , aesthetic sensitivity, autonomy in thought and action and pursuit of new challenges and solutions, curious, self-assertive, high achiever, self critical, self-sufficient, intuitive and empathic, emotional sensitivity, imagination, ambition and dominance, self acceptance, dominance, self confidence, acceptance of unusual views as their personality characteristics (Feist, 1999; Sameen and Burhan, 2014). In another reference Bonk explained that there are three creativity traits, namely (1) products (fluency, flexibility, originality,

elaboration), (2) attitudes (curiosity, imagination, complexity, risk-taking), (3) behaviors (flexible, imaginative, nonconforming, novel answers).

Operational definition; creative personality is operationally defined as the characteristic patterns of thoughts, feelings, and behaviors that contain elements of creativity and relatively fixed in a person. Creative person in this inventory will trace through eight factors Originality, Useful, Curiosity, Imagination, Risk-taking, Flexibility, Unique, Valuable. The planned number of items grains are 24 items to select from items that are valid. Type of item Likert Scale scale model (1 = very suitable, 2 = suitable, 3 = slightly proper, 4 = not proper, 5 = strongly disagree). Participants; the samples were taken from two different departments namely natural science and social science. Total participants were 146 high school students in Lampung, Indonesia. Participants men = 50 and women = 96, average age 17:39 (SD = .735), range 15-19 years. Before filling inventory the participants will give an explanation about inventory and research purposes. Participants were given 45 minutes to apply inventory.

Results; analysis conducted the confirmatory factor analysis of the 24 items using SPSS version 17. The eight factors that plan (Originality, Useful, Curiosity, Imagination, Risk-taking, Flexibility, Unique, Valuable) after the factor analysis performed reduce to seven factors (Originality, Curiosity, Imagination, Risk-taking, Flexibility, Unique, Valuable). There is one missing factor that (Useful), more clearly seen in Table 1 and Table 2 below.

Tabel 1. Original factor dan items

No	Factor	Number Item	Total item
1	Originality	1, 2, 3	3
2	Useful	4, 5, 6	3
3	Curiosity	7, 8, 9	3
4	Imagination	10, 11, 12	3
5	Risk Taking	13, 14, 15	3
6	Flexibility	16, 17, 18	3
7	Unique	19, 20, 21	3
8	Valuable	22, 23, 24	3
Total			24

Tabel 2. Factor dan items after analysis

No	Factor	Number Item	Total item
1	Originality	1, 2, 3, 6	4
2	Curiosity	7, 8, 9	3
3	Risk Taking	10 , 14, 15, 16	4
4	Useful	4, 5 , 22, 23, 24	5
5	Unique	19, 20, 21	3
6	Flexibility	17, 18	2
7	Imagination	11, 12, 13	3
Total			24

The results of the factor analysis obtained by Kaiser-Meyer-Olkin (KMO) with a value greater than .60 .858 as the recommended value. The Bartlett's Test of Sphericity was significant ($p < .001$) suggesting that factor analysis is appropriate. The overall value of the seven factors explains 65.22% of the total variance. Of the 24 items, all have a factor loading values ($> .40$).

Tabel 3. Factors and items selected after analysis

No	Factor	Number Item	Total item
1	Originality	1, 2, 3	3
2	Curiosity	7, 8, 9	3
3	Risk Taking	14, 15, 16	3
4	Useful	4, 22, 23	3
5	Unique	19, 20, 21	3
6	Flexibility	17, 18	2
7	Imagination	11, 12, 13	3
Total			20

Tabel 4. Factors and selected items after re-run analysis 1

No	Factor	Number Item	Total item
1	Useful	22, 23, 4, 14, 15	5
2	Curiosity	7, 8, 9	3
3	Originality	1, 2, 3	3
4	Unique	19, 20, 21	3
5	Flexibility	16, 17, 18	3
6	Risk Taking	11, 12, 13	3
Total			20

Nevertheless, there remains item we eliminated, taking into account proportion of items on each factor so that the selected 20 items, clearly shown in Table 3. The items eliminate is item number 5, 6, 10, and 24, bringing the total to 20. item analysis was then performed again, the results are shown in Table 4. the results of the analysis of the first to do is exactly what happened at first reduction factor of seven factors into six factors (Table 4).

Then do a name change factor of Risk Taking into Confidence. We eliminate item number 14 and 15 that to similar proportion items in part of factor. After that re-analysis of this model in both results shown in Table 5 below.

Tabel 5. Factors and items selected after re-run analysis 2

No	Faktor	Nomor Item	Total item
1	Curiosity	7, 8, 9	3
2	Flexibility	16, 17, 18	3
3	Useful	22, 23, 4	3
4	Originality	1, 2, 3	3
5	Unique	19, 20, 21	3
6	Confidence	11, 12, 13	3
Total			18

Table 5 shows the final model of the creative personality inventory. There are six factors that are consistent with three items on each factor and a total item is 18. The final results of the factor analysis obtained by Kaiser-Meyer-Olkin (KMO) with a value of .842 and Bartlett's Test of Sphericity ($p < .001$) it has reasonably become requirements analysis undertake factory. Besides, every item has eigenvalue greater than (.30) as a suggested cutoff point. The overall value of the six factors explains 68.30% of the total variance. In Table 6 presented a loading factor for each item in the final model.

Discussion; Conduct this study to develop a creative personality inventory. The result is an adequate inventory developed to measure the creative personality. However, note in this study the inventory only tested in the Indonesian version. It was still possible to reconfirmed and tested on a large sampling in other versions. For example, tested on high school students in urban areas with a number of participants. Inventory developed is also still limited to the context of Indonesia. The results of this study indicate that the creative personality inventory produce can be used and accounted for. Of the eight planned factory reduced to six factors. Finally factor 1 = Curiosity (3 items), 2 = Flexibility (3 items), 3 = Useful (3 items), 4 = Originality (3 items), 5 = Unique (3 items), 6 = Confidence (3 items) with a total item 18.

Conclusion; considering limitations of the study, necessary be careful in interpreting to explain the resulting creative personality inventory. In the analysis using factor analysis to examine the construct exploratory planned. This study could form the basis of empirical support the use of creative personality inventory. The Creative Personality Inventory can use by counselors or educators to conduct need assessment of creative students. The results can use the basis to planned of guidance and counseling program services in the schools.

Tabel 6. Summary of Final Factor Loading by Six Factor and Items

Items	Factor					
	1	2	3	4	5	6
8. I often look for information on something that interests me	.871	.131	.105	.074	-.048	.038
7. I asked many questions about something that I have not known	.809	-.016	.158	.184	.037	.198
9. There is a strong urge to know more when I encounter new things.	.691	.349	.075	-.021	.267	.047
18. I can easily change the plan, even though I already have a plan that mature earlier	.054	.763	.222	.004	-.103	.057
17. I have a habit of using the different goods with actual function	.078	.705	-.030	.310	.170	.117
16. When others think of one thing, I always thought a couple of different things	.292	.591	.146	.076	.234	.066
22. Utilizing the existing important to me than having to buy	.140	.124	.753	-.052	.343	-.016
23. Something considered valuable can I change becomes more valuable with a simple way	.093	.154	.700	.246	.143	.131
4. I would rather make something more useful	.130	.119	.573	.455	.054	.125
2. I like to combine something more interesting	.246	.000	.120	.833	.041	.104
1. I admittedly have the skills to create something new	.049	.168	.036	.691	.340	.021
3. Find new ways of solving the problem is easy for me	-.120	.355	.306	.594	.229	-.061
20. Teachers and friends admit that I have a unique habit exemplary	.102	.097	.169	.090	.826	.150
19. Friends admit that I am a creative person	-.031	.003	.161	.332	.737	.030
21. I have a different way of solving problems	.268	.385	.384	.200	.509	.104
13. I easily face a difficult situation in friendship	.041	.023	-.038	.057	.192	.908
12. I believe that happened in my life, started from my previous dream	.308	.178	.453	.028	-.014	.560
11. I believe that has not happened can imagine easier way to achieve something	.196	.452	.311	.079	.000	.543
Note: Factor 1= Curiosity, 2= Flexibility, 3= Useful , 4= Originality, 5= Unique, 6= Confidence Item 5, 6, 10, 14, 15 and 24 were eliminated						

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