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Analysis of Adolescent Creative Thinking Skills Scale Based on Creative Personality Perspective

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ABSTRACT

The continuous development of the world demands skill abilities in its human resources both in educational, economic, and artistic jurisdictions. Creative thinking skills are one of the important skills to have and develop to survive and compete in the 21st century. Creative thinking skills are known as the ability to understand gaps or obstacles in life, the ability to adapt creatively, and the ability to solve problems creatively needed in the 21st century. The purpose of this paper is to develop a tool for assessing youth's creative thinking skills which are used to measure the creative attitudes of high school-aged youth. Based on the analysis of the relevant literature, this study developed 48 items that were intended to reflect the creative thinking skills of adolescents based on a creative personality perspective. The samples taken were 135 adolescents aged 15-20 years in the city of Bandung. Item validity and scale reliability were measured using the Rasch modeling. The results showed that 1) the Cronbach Alpha score was 0.88 in the very good category, 2) the item reliability coefficient was 1.00 in the special category, and 3) the person reliability coefficient was 0.87 in the good category, which means that adolescents respond consistently to each item. Based on the results of the Rasch modeling analysis, this paper maintains 46 valid items while 2 other items are invalid.

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1. INTRODUCTION

The need for creative thinking skills or creativity is felt; viewed from any aspect of life, because at this time we are all involved in threats to survival, facing various challenges, both in the economic, health, political, cultural, and social fields (Yusri, 2017). Living in a time when science is growing rapidly to be used constructively or destructively. A creative adaptation is the only possibility for a developing nation to be able to keep up with the changes that are occurring and to be able to face increasingly complex problems. As individuals, groups, or nations, individuals must be able to think, form new ways, and creatively change old ways to survive or survive and not drift away in competition between nations and countries.

Human resources are considered to be the main factor in facing the industrial revolution 4.0 era. This era demands skills within oneself; in the form of human resources, so that they can become actors and compete in the era of the industrial revolution 4.0. This opinion was further strengthened by the results of national and international research conducted by The State of Queensland, Queensland Curriculum and Assessment Authority (QCAA) (Grainger *et al*., 2019) to determine the general classification of 21st Century skills. across all educational jurisdictions, six critical skills were identified, namely: critical thinking, creative thinking, communication, collaboration, personal and social skills, and ICT skills.

The Global Creativity Index (GCI) explains that Indonesian creativity is among the lowest at the global level; is ranked 115 out of 139 countries. The Martin Prosperity Institute surveyed to assess a country's creativity index based on three indicators, namely technology, talent (HR), and tolerance. The problem of creativity is a rare theme in the learning process in Indonesia due to the lack of research results discussing the theme of creativity. This can be seen from the results of internet searches that rarely find research on creativity in Indonesia that is published online (Susanto *et al.,* 2018). The efforts of the Indonesian government in advancing education to be able to meet the demands of a changing state of globalization, namely by developing a curriculum that is implemented to adapt to dynamic world changes where its roles include conservative, creative, critical, and evaluative (Agustin, 2019).

Creative thinking involves individuals learning to generate and apply new ideas in certain contexts, see situations in new ways, identify alternative explanations, and see or create new links that produce positive results. Creative thinking skills in this study focus on the educational context, not on the context of art, industry, or the economy (Craft, 2003). Because the definition of creativity will be different when the context is a different yardstick, while the perspective used in this study looks at creative thinking skills from a personality perspective so that the main objective of this study is directed to identify people who have creative thinking skills, the choice of theory personality as a basic theory (Susanto *et al*., 2018).

It is important to improve creative thinking skills in various ways, especially within the scope of education to form individual learners who can actualize themselves, individuals who can see various kinds of possible solutions to a problem they face, individuals who become useful for themselves and for their environment that provide satisfaction. himself as an individual, as well as being a person who can improve the quality of his life (Holis, 2017).

In the education unit, school counselors have a strategic role to play as pioneers in the development of students' creativity in schools (Susanto *et al*., 2018). Guidance and counseling are efforts of assistance provided by professional counselors in creative ways to counselees so that counselees can grow in the direction they choose themselves, be able to solve problems, face, and be able to face the crises of their life (Kurniawan *et al.,* 2022).

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1.1. Meaning of Creative Thinking

Creative thinking skills consist of two syllables, namely thinking and being creative. Thinking itself is a mental activity that is experienced by someone when they are faced with a problem or situation that must be solved (Siswono, 2016). While creative is having the ability to create or have creativity (Zakiah *et al.,* 2020). Creativity is an individual tool to express creativity that is owned as a result of the ability to think creatively. Creative thinking skills are a manifestation of individual skills in using reason to generate ideas, create something new, original, and valuable, seek meaning, and solve problems innovatively.

Creativity is a lifestyle, a way of perceiving the world. A creative life means developing one's talents, learning to use one's abilities optimally, exploring new ideas, new places, and new activities, and developing sensitivity to environmental problems, other people's problems, and humanity's problems. In general, creative people who can actualize themselves are individuals who have a healthy mentality, live fully and productively, and tend to face all aspects of their lives flexibly and creatively (Hasanah *et al.,* 2018).

Creative/creative thinking skills are the result of the synthesis of a dialectical process, a breakthrough insight that is obtained after we grapple with conflicts, tensions, and contradictions that take place in our psychological world. That's why creativity implies courage. Courage in this context is not physical courage or psychological courage as the loss of fear and despair, but the capacity that Soren Kierkegaard, Friedrich Nietzsche, Albert Camus, and Jean-Paul Sartre called the ability to keep moving forward even when faced with despair. Thus, the creative process is not a completely fun and easy way because in it we will be faced with suffering, obstacles, anxiety, and frustration. Creativity is a tendency to actualize oneself, realize potential, drive to develop and mature, the tendency to express and activate all the abilities of the organism (Setiawati, 2019).

Creativity is defined as an ability, which is identified by the presence or number of observed personality traits such as originality, persistence, non-conformity, and so on in combination with motivational traits such as resistance to premature closure, problem-solving processes such as the combination of unusual ideas and the ability to produce original, relevant and useful products (Karwowski & Jankowska, 2016).

Guilford one of the founders of creativity theory, distinguishes six parameters of creativity, which are the basis of creative thinking. The following are six types of individual abilities that think and act creatively: (a) the ability to identify and state problems, (b) generating a large number of problems, (c) quickly generating various ideas, (d) making long-distance associations and non-standard solutions, (e) enhancing objects by adding details and (f) the ability to see new object characteristics and new ways of applying them (Andriopoulos, 2003).

1.2. Aspects of Creative Thinking

Aspects of creative thinking including aptitude and non-aptitude traits, these two aspects are needed so that creative behavior can be created. Aptitude traits consist of aspects of fluency, flexibility of thinking, and originality in thinking. Meanwhile, the non-aptitude traits consist of aspects that cover creative personality traits (Widiana *et al.,* 2017).

Aspects that indicate individuals have creative personal characteristics, namely having broad interests, self-confidence, sufficient independence, more daring to take risks (but with calculations), being more prominent than their peers because of their uniqueness, imagination, curious by exploring themselves because he wants to find things that are not known and looking for new experiences and is tenacious. This means that in doing something very meaningful, important, and liked by them, they don't pay attention to the criticism or ridicule of others. They are also not afraid to make mistakes and speak their minds even when

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others may disagree. Their self-confidence and tenacity and their persistence make them not easily give up on achieving their goals.

1.3. Negative Thinking Personality Formation Theory

The formation of a creative personality consists of psychoanalytic theory and humanistic theory, explained as follows:

1.3.1. Psychoanalytic Theory

In general, psychoanalytic theories see creativity as a result of overcoming a problem that usually begins at the age of children. A creative person is seen as someone who has had a traumatic experience that is faced with allowing conscious and unconscious ideas to mix into an innovative solution to trauma, namely "creative action transforming an unhealthy psychological state into a healthy one" (Dirlanudin, 2006).

(i) **Freud's Theory.** According to some psychologists, creative ability is a personality trait that persists in the first five years of life. Sigmund Freud (1856-1939) was the main character who held this view. He describes the creative process of defense mechanisms, which are unconscious attempts to avoid being aware of unpleasant or unacceptable ideas. Because defense mechanisms prevent control of the world because they consume psychological energy, and defense mechanisms usually hinder creative productivity.

(ii) **Kris Theory.** Ernest Kris (1900-1957) emphasized that the defense mechanism of regression (turning to a previous behavior that gave satisfaction, if the current behavior does not work or does not give satisfaction) is also often present in creative acts. If one can “regress” to child-like frames of mind or behavior patterns, the barrier between the conscious and unconscious mind becomes less, and unconscious material which often contains the seeds of creativity can penetrate the conscious realm. Creative individuals are individuals who are most able to summon materials from the mind subconsciously. As adults, we are never like children again, but creative individuals are not hindered by being like children in their minds. Creative individuals can maintain a playful attitude with serious problems in life. Thus, creative individuals can see problems freshly and innovatively to "regress in the service of the ego".

(iii) **Jung’s Theory.** Carl Jung (1875-1961) also believed that the unconscious plays a very important role in high-level creativity. The unconscious mind is shaped by the personal past. Besides, the hazy memories of the experiences of all mankind are stored there. We subconsciously "remember" the most influential experiences of our ancestors. From this collective unconscious emerge discoveries, theories, art, and other works. It is this process that causes the continuation of human existence.

1.3.2. Humanistic Theory

The humanistic theory sees creativity as the result of high levels of psychological health. Creativity can develop throughout life and is not limited to the first five years (Nisa, 2018).

(i) **Maslow’s Theory.** According to Abraham Maslow (1908-1970), the main proponent of the humanistic theory, humans have basic instincts that become manifest as needs. These needs must be met in a certain order, namely; Primitive needs arise at birth, and higher-order needs develop as the maturation process. The order of the needs of this hierarchy is; nothing can manifest itself while suffering from hunger. The first four needs are called deficiency needs because they may not be satisfied until they are no longer felt as needs. For example, if we are hungry we can eat as much as we want so that the

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need is fulfilled. The two needs at the highest level (actualization and aesthetics) are called being needs, because when they are nurtured they become stronger, which enriches our existence. For example; learning to understand and appreciate music increases the desire to learn more about music. The process of self-realization is closely related to creativity, free from neuroses, people who manifest themselves can focus on the essentials. They can achieve what Maslow called a "peak experience" when they get a figurative inspiration "flash of insight" that causes joy and gratitude for life.

(ii) **Roger's Theory.** According to Carl Rogers (1902-1987), the three conditions of a creative person are Openness to experience, The ability to assess situations according to one's standards (internal locus of evaluation), and The ability to experiment to "play" with concepts.

Every individual who has these three characteristics has very good psychological health. This individual functions fully to produce creative works and lives creatively. These three characteristics or conditions are also light from within to be creative (Qorib *et al.,* 2022).

These two schools of theory are fundamentally very different in the explanation of creative personality, both of which have their meaning. The emphasis of psychoanalytic theory on the unconscious mind and the emergence of creativity as compensation for difficult childhood can explain the lives of productive figures. Meanwhile, humanistic theory places more emphasis on psychological health that allows a person to overcome life's problems. This theory starts from the view that "humans determine their destiny".

Humanistic schools view creativity as more conscious, cognitive, and intentional than psychoanalytic theory. The humanistic concept is that creativity is born because of the urge to achieve the highest possibilities in life and not as a defense against neurosis. The presentation of these theories, both in the psychoanalytic and humanistic schools, helps to understand the formation of creative personal characteristics.

2. METHODS

The preparation of a scale for adolescents' creative thinking skills was carried out through three stages, namely, first, compiling statement items, second, construct, content, and language evaluation by experts, and third, data analysis. The preparation of the scale is based on the concept of adolescent creative thinking skills based on the personality perspective described by Munandar. Adolescent creative thinking skills are divided into twelve aspects namely, 1) fluency aspect, 2) flexibility aspect, 3) originality aspect, 4) interest aspect, 5) self-confidence aspect, 6) independence aspect, 7) courage to take risks aspect, 8) uniqueness aspect, 9) imagination aspect, 10) curiosity aspect, 11) self-exploration aspect and 12) tenacity aspect.

In this paper, creative thinking skills are defined as a way of perceiving the world which means developing one's talents, learning to use one's abilities optimally, exploring new ideas, new places, and new activities, and developing sensitivity to environmental problems, other people's problems, human problems. Creative individuals can actualize themselves, as mentally healthy individuals, live fully and productively, and tend to deal with all aspects of their lives flexibly and creatively.

The items that have been arranged based on the creative thinking skills of adolescents are then evaluated for construct, content, and language by experts in the field of midwifery and counseling through a judicial process. The results of the judgment will result in qualifications being accepted, revised, or rejected. The final stage is to conduct an empirical test to determine the quality of the scale items. The scale was tested on subjects who have the same

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characteristics as the subject to be measured. This test aims to analyze the scale to obtain a scale of adolescent creative thinking skills that have valid and reliable items.

3. RESULTS AND DISCUSSION

Instrument validity is a measure that shows the level of validity of an instrument. The validity of the measurement means how far the instrument can measure what attributes must be measured according to the stated goals (Djollong, 2014). The validity of the instrument was processed with the help of the Rasch model (Rasch Model) with the help of Winstep software. To see the quality of the items from the aspect of validity is if they meet several criteria from the value of the Outfit Mean Square (MNSQ) received: 0.5 < MNSQ < 1.5, the Outfit Z-Standard (ZSTD) value received: -2.0 < ZSTD < +2.0, and Point Measure Correlation value (Pt Mean Corr): 0.4 < Pt Mean Corr < 0.85.

However, the thing that must be considered is if the z-standard outfit (ZSTD) value is very sensitive to the number of samples, if more than five hundred samples are used (> 500), then the z-standard outfit value (ZSTD) tends to have a value above 3. So from Therefore, some experts recommend not using the z-standard outfit value criteria (ZSTD) if the sample is large enough (Khamis *et al.,* 2016), because the sample used in this paper is 1420 teenagers, the z-standard outfit score criteria (ZSTD)) not used. Then some experts have opinions about the required point measure correlation (Pt Mean Corr), namely very good (> 0.40), good (0.30-0.39), sufficient (0.20-0.29), unable to discriminate (0.00-0.19), and requires examination of the item (<0.00). The results obtained from the validity test of the creative thinking skills questionnaire are presented in **Figure 1.**

Based on the results of the analysis above, the statements that need to be removed because they are invalid are numbers 6 and 46. Based on the items that must be discarded there are 2 numbers.

After testing the validity of each item, the instrument is then tested for its reliability level, reliability is related to the degree of consistency and stability of the instrument. Reliability is the extent to which the results of a measurement can be trusted (Amanda *et al.,* 2019). The purpose of reliability is to determine the level of trust and accuracy of the instrument so that it can produce scores consistently (Cook & Beckman, 2006). In testing the reliability of the instrument using Cronbach's alpha formula, the reliability testing process was processed with the help of Rasch modeling (Rasch Model) with the help of Winstep software.

The reliability test in this study was carried out using the Rasch model based on the following criteria.

(i) In in-person measure, the average value higher than logit 0.0 indicates the reliability of the respondent is greater than the difficulty of the item.

(ii) Cronbach's Alpha value is the interaction between a person and an item as a whole.

Based on the description of the statistical data that has been carried out, the reliability of this instrument can be seen in **Table 1** and **Figure 2.**

Table 1. Instrument Reliability Test Results

	Mean Measure	Separation	Reliability	Alpha Cronbach
Person	0.77	2.55	0.87	0.88
Item	0.00	18.73	1.00	

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ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Item
27	2985	1420	1.66	.04	1.02	.7	1.03	.8	.34	.43	55.3	49.3	N27
18	3148	1420	1.43	.04	.97	-1.0	.98	-.7	.47	.42	54.4	49.6	N18
36	3298	1420	1.22	.04	1.16	4.6	1.17	4.8	.46	.42	45.5	49.8	N36
7	3341	1420	1.16	.04	.90	-3.2	.93	-2.2	.24	.42	55.1	49.8	N7
34	3483	1420	.96	.04	.71	-9.4	.72	-9.1	.49	.41	61.5	50.1	N34
4	3552	1420	.86	.04	.92	-2.4	.94	-1.9	.36	.41	54.4	50.4	N4
26	3584	1420	.81	.04	1.08	2.1	1.10	2.7	.32	.41	50.7	50.6	N26
2	3614	1420	.77	.04	.88	-3.5	.89	-3.2	.48	.41	56.1	50.9	N2
21	3629	1420	.75	.04	1.16	4.3	1.17	4.7	.40	.41	49.8	51.2	N21
31	3656	1420	.71	.04	.88	-3.5	.89	-3.2	.40	.41	56.5	51.2	N31
43	3732	1420	.60	.04	1.21	5.5	1.23	5.9	.41	.40	51.9	52.1	N43
20	3738	1420	.59	.04	1.16	4.3	1.20	5.3	.36	.40	53.3	52.1	N20
12	3785	1420	.52	.04	.77	-6.8	.78	-6.5	.50	.40	61.6	52.8	N12
37	3822	1420	.46	.04	1.44	9.9	1.47	9.9	.34	.40	49.4	53.3	N37
11	3829	1420	.45	.04	.98	-.7	1.01	.2	.33	.40	57.5	53.3	N11
5	3883	1420	.37	.04	1.21	5.4	1.23	5.8	.28	.40	48.7	54.0	N5
8	3887	1420	.37	.04	1.22	5.5	1.23	5.8	.43	.40	52.5	54.0	N8
30	3928	1420	.30	.04	1.11	2.8	1.11	2.8	.47	.39	53.8	54.4	N30
32	3984	1420	.22	.04	.67	-9.9	.69	-9.5	.39	.39	67.9	55.1	N32
6	3994	1420	.20	.04	1.75	9.9	1.78	9.9	.18	.39	39.5	55.4	N6
45	4003	1420	.19	.04	1.09	2.5	1.10	2.6	.52	.39	53.0	55.4	N45
24	4050	1420	.11	.04	.82	-5.2	.82	-5.3	.43	.39	60.2	56.0	N24
40	4053	1420	.11	.04	.83	-4.7	.83	-4.8	.44	.39	64.2	56.0	N40
1	4055	1420	.10	.04	.72	-8.4	.73	-7.9	.37	.39	64.2	56.1	N1
15	4083	1420	.06	.04	.90	-2.6	.91	-2.4	.39	.39	62.1	56.5	N15
44	4090	1420	.05	.04	1.03	.7	1.04	.9	.44	.39	55.7	56.6	N44
46	4100	1420	.03	.04	1.62	9.9	1.74	9.9	.03	.39	43.4	56.7	N46
23	4101	1420	.03	.04	1.12	3.1	1.15	3.9	.29	.39	55.7	56.7	N23
3	4126	1420	-.01	.04	.90	-2.7	.94	-1.6	.26	.38	59.7	57.0	N3
22	4137	1420	-.03	.04	.93	-1.8	.94	-1.7	.48	.38	61.4	57.0	N22
19	4153	1420	-.05	.04	1.25	6.3	1.26	6.3	.35	.38	52.3	57.3	N19
17	4182	1420	-.10	.04	1.16	4.1	1.19	4.7	.37	.38	55.0	57.6	N17
41	4183	1420	-.10	.04	.78	-6.3	.78	-6.2	.48	.38	62.5	57.6	N41
28	4308	1420	-.31	.04	.78	-6.1	.79	-6.1	.49	.37	64.6	58.3	N28
16	4505	1420	-.66	.04	1.06	1.5	1.07	1.8	.39	.36	56.5	58.3	N16
48	4522	1420	-.69	.04	1.03	.8	1.02	.6	.48	.36	58.9	58.2	N48
47	4547	1420	-.74	.04	.86	-3.9	.86	-4.0	.47	.36	62.5	58.1	N47
9	4566	1420	-.77	.04	.92	-2.3	.95	-1.5	.40	.36	62.1	58.0	N9
25	4599	1420	-.84	.04	.93	-1.9	.97	-.9	.24	.35	63.7	57.9	N25
35	4610	1420	-.86	.04	1.03	.8	1.06	1.5	.30	.35	58.9	57.8	N35
33	4651	1420	-.93	.04	.81	-5.6	.81	-5.6	.45	.35	66.7	57.7	N33
39	4653	1420	-.94	.04	.63	-9.9	.63	-9.9	.48	.35	70.8	57.7	N39
14	4722	1420	-1.07	.04	.80	-6.1	.79	-6.3	.51	.34	66.6	57.4	N14
10	4733	1420	-1.10	.04	1.06	1.6	1.08	2.1	.31	.34	57.2	57.5	N10
42	4759	1420	-1.15	.05	.89	-3.3	.87	-3.7	.46	.34	64.5	57.4	N42
29	4790	1420	-1.21	.05	.81	-5.7	.80	-5.8	.40	.33	66.2	57.3	N29
38	4847	1420	-1.33	.05	.81	-5.8	.81	-5.4	.44	.33	67.2	57.3	N38
13	5187	1420	-2.16	.05	.96	-1.2	.94	-1.3	.31	.27	68.7	67.2	N13

Figure 1. Item Measure Analysis

SUMMARY OF 1420 MEASURED Person

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	138.2	48.0	.77	.22	1.02	-.3	1.01	-.3
S.D.	13.2	.0	.67	.02	.53	2.5	.52	2.4
MAX.	190.0	48.0	5.49	.72	4.63	9.9	4.61	9.9
MIN.	103.0	48.0	-.81	.21	.24	-5.7	.24	-5.8

REAL RMSE	.25	TRUE SD	.63	SEPARATION 2.55	Person RELIABILITY	.87
MODEL RMSE	.22	TRUE SD	.64	SEPARATION 2.85	Person RELIABILITY	.89

S.E. OF Person MEAN = .02

Person RAW SCORE-TO-MEASURE CORRELATION = .99

CRONBACH ALPHA (KR-20) Person RAW SCORE "TEST" RELIABILITY = .88 sangat baik

SUMMARY OF 48 MEASURED Item

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	4087.2	1420.0	.00	.04	.99	-.8	1.01	-.5
S.D.	479.1	.0	.80	.00	.22	5.1	.23	5.2
MAX.	5187.0	1420.0	1.66	.05	1.75	9.9	1.78	9.9
MIN.	2985.0	1420.0	-2.16	.04	.63	-9.9	.63	-9.9

REAL RMSE	.04	TRUE SD	.80	SEPARATION 18.73	Item RELIABILITY	1.00
MODEL RMSE	.04	TRUE SD	.80	SEPARATION 19.44	Item RELIABILITY	1.00

S.E. OF Item MEAN = .12

Figure 2. Instrument Reliability Test Results

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Based on the results of the instrument reliability test in **Figure 2** and **Table 1** above, the results of the Person Mean Measure are 1.35 logit, which means that it is greater than the logit value of 0.0. Thus, the respondent's capability is greater than the difficulty level of the item. The person reliability value of 0.88 is included in the very good category and the item reliability value of 1.00 is included in the special category. Croncbach's Alpha value of 0.88 is included in the very good category, meaning that the interaction between respondents and items is very good so that the instrument can be trusted to be used as a data collection tool.

The level of difficulty of the items can be seen in the analysis of the Wright map above which can be interpreted that there are no items that are the most difficult, while items that are too easy because teenagers answer correctly as expected are item number 13, while items that show the easy category are number 25, 35,47, 9, 10, 14, 33m 39, 29, 42, and 38 (**see Figure 3**).

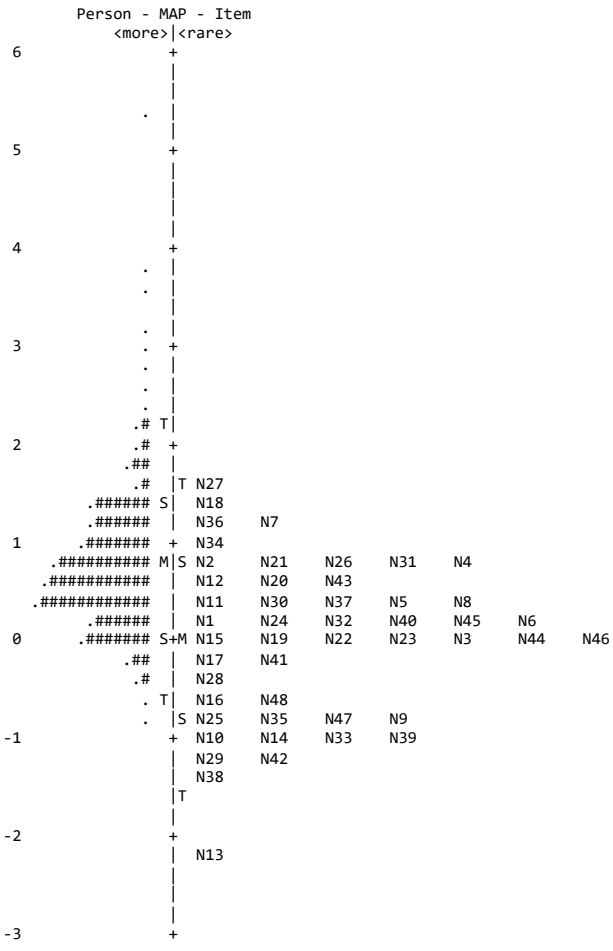

Figure 3. Map item.

4. CONCLUSION

Based on the analysis of creative thinking skills, it can be concluded that:

(i) Scale validity, out of 48 items, there are 46 valid items based on the calculation of the Rasch model analysis, the rest are invalid items because they do not meet the criteria for the Outfit Mean Square (MNSQ) and Point Measure Correlation (Pt Mean Corr) values.

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(ii) Scale reliability, Person Mean Measure 0.77 logit which means greater than the logit value of 0.0 so that the respondent's capability is greater than the difficulty level of the item. The person reliability value of 0.87 is included in the good category and the item reliability value of 1.00 is included in the special category. Croncbach's Alpha value of 0.88 is included in the very good category, meaning that the interaction between respondents and items is very good so that the instrument can be trusted to be used as a data collection tool.

(iii) Based on the analysis of Wright's map, it can be interpreted that there are no items that are the most difficult, while items that are too easy because teenagers answer correctly as expected are item number 13, while items that show the easy category are number 25, 35, 47, 9, 10, 14, 33, 39, 29, 42, and 38.

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