



European Journal of Educational Research

Volume 9, Issue 3, 1115 - 1125.

ISSN: 2165-8714

<http://www.eu-jer.com/>

Evaluation of the Pictures Drawn by Adults for 'Non-Existent Animal' Test by Gender

Sultanberk Halmatov*

Agri Ibrahim Cecen University, TURKEY

Received: April 14, 2020 ▪ Revised: May 30, 2020 ▪ Accepted: June 17, 2020

Abstract: "Non-existent Animal" test, which is projective in nature, has been used as an individual recognition technique in many countries, especially in Russia. There are a number of important differences that distinguish "Non-existent Animal" Test from other similar tests. The most important one is that the "thing" to be drawn is something that does not exist. Drawing something that does not exist is different from drawing something that exists. S/he could be more cooperative due to lack of anxiety for not being able to make the picture similar to anything. Another difference is that it is not restrictive. In this study, pictures drawn by 154 university students for the "Non-existent Animal" projective test were examined. The pictures drawn by the participants were evaluated by the researcher in light of some keys of the Non-existent Animal Test. These keys were determined as; the originality of the drawn picture; the general status of the lines; the status of the drawn animal's organs such as head, eyes, ears, feet, arms, wings, thorns, antennae; and the animal's way of life. Results showed that the pictures drawn by the males and females were different from each other in many aspects.

Keywords: Non-existent animal, evaluation, projective tests.

To cite this article: Halmatov, S. (2020). Evaluation of the pictures drawn by adults for 'non-existent animal' test by gender. *European Journal of Educational Research*, 9(3), 1115-1125. <https://doi.org/10.12973/eu-jer.9.3.1115>

Introduction

"Non-existent Animal" test was developed by the Russian expert Dukarevich and Yan'shin (1990). The test, which is projective in nature, has been used as an individual recognition technique in many countries particularly in Russia (Dukarevich & Yan'shin, 1990; Halmatov, 2016; Venger, 2007). This test was designed in a similar way with the projective picture tests such as "Draw-a-Person Test" and "The House-Tree-Person Test (HTP)", which have been used for years. There are a number of important differences that distinguish the Non-existent Animal Test from other similar tests. The most important one is that the "thing" to be drawn is something that does not exist. Drawing something that does not exist is different from drawing something that exists. The person who draws the picture is more free and less resistant. S/he could be more cooperative due to lack of anxiety for not being able to make the picture similar to anything. Another difference is that it is not restrictive. As there is not anything concrete, the person who draws the picture needs to use his/her imagination more. According to various professionals' imagination (fantasy) and subconscious interact with each other (Aleksandrova, 1999; Alibal, 1974; Venger, 2007). According to Secenov, people dream to overcome the pressure of the "things" they keep in their subconscious. According to this this assumption, a non-existent animal drawn by an individual is imaginary, and thus, it is a reflection of subconscious (as cited in Venger, 2007).

Many studies have concluded that there are many links between the animal drawn in the "Non-existent Animal Test" and the individual who draws that animal. The assertion about the connections between the "self" image and the picture drawn is almost unquestionable. The pictures drawn are considered to be a mixture of the experience and imagination (fantasy). One can reflect some clues from his/her self-perception anxiety and fears, anger, or inner conflicts to the pictures s/he draws (Aleksandrova, 1999; Batov, 1991; Ivanova, 1998; Korner, 2000; Talu, 2019; Venger, 2007).

Non-existent Animal Test is a projective test that can be applied to children over the age of 5 and adults. This test has been developed to recognize and evaluate the individual's "invisible" aspect (inner world). It's a very effective

*Correspondence:

Sultanberk Halmatov, Agri Ibrahim Cecen University, Health Services Vocational School of Higher Education, Turkey. ✉ halmatovs@gmail.com

technique especially for individuals who are not willing or are resistant or who have restrictions about expressing themselves (Amundson, 2012; Stepanov, 2004; Tsuladze, 1969; Venger, 2007). This technique is also an effective tool for initiating a conversation between professional and the client. When the Non-existent Animal test is applied in an environment with the required conditions, it is possible to obtain the following clues about the person who draws the picture:

- (1) Biological and psychobiological features of the individual such as the type of nervous system, general tonus of the body, affectivity, depression, neurosis, and psychosomatic symptoms; in other words, temperament of the individual.
- (2) Individual features of the person such as fear, anxiety, way of self-expression, adaptability level and coping strategies; in other words, character of the individual.
- (3) Social skills of the individuals that are formed later with education such as extroversion and introversion, conflict, pretentiousness, aggression, self-confidence, lack of confidence, and communication skills (Venger, 2007).

Some of the clues in the drawn pictures display the above-mentioned information. For instance, information provided by the size of the picture, state of the lines, place of the picture on the page, use of erasers, the colors used and the general characteristics of the drawn animal are valuable clues for the professional. When a picture is analyzed, the clues given above are expected to be consistent with each other. In other words, the clues about the temperament of the individual, characteristic features and social nature should support each other. For example, in the picture of a person whose temperament clues are emotional, and character clues are pessimistic, clues about their social skills cannot be extroverted. An individual who is emotional and pessimistic cannot be extroverted.

Of course, being able to see these clues requires specialization. It is a prerequisite that the professional who interprets the picture is trained on this subject. In addition, the professional should also have sufficient knowledge about subconscious mechanisms such as id, ego, and superego. The professional should also have knowledge about psychological defense mechanisms, symbols, metaphors, and archetypes (Amundson, 2012; Batov, 1991; Korner, 2000; Tsuladze, 1969).

It is possible to say that various studies try to evaluate the reliability and validity of the Non-existent Animal Test (Ivanova, 1998; Sherbatyh, 2003; Shevchenko, 2014; Tsuladze, 1969). A number of studies have highlighted that the results of the Non-existent Animal Test and other Standard tests are remarkably similar.

Another study compared the patients who were diagnosed with neurosis and healthy individuals, and again reported consistent results with previous studies (Gabidulina, 1986). Similarities were found in the study that compared The Drawing a Non-existent Animal test and Bass-Darki Aggression Scale (Ermolenko, 2017). A positive correlation was detected with Prihozan Anxiety Test, Cattle Anxiety Scale and the Drawing a Non-existent Animal test (Sherbatyh, 2016).

Methodology

Research Goal

The aim of this study is to analyze the pictures drawn by university students for "Non-existent Animal" projective test according to gender. In accordance with this aim, the study has aimed the differences between the pictures in terms of aim features such as the size of the picture, state of the lines, creativity levels, and general features of the animal drawn.

Sample and Data Collection

The participants of the study consist of 154 adults, 73 of whom are males and 81 are females, between 19-24 ages who are university students. They were selected from Vocational School of Health Services. The participants were studying in different departments, some of which were immediate aid, child development and disability care. The participants were selected with convenience selection method (Yildirim & Simsek, 2005).

Data were collected through the semi-structured interview technique. The participants were first asked to fill in the Personal Information Form and then draw a non-existent animal. When they completed the picture, they were asked to give a name to the animal they drew and write down the characteristics of the animal on the back side of the paper. Data were collected in Agri city of Turkey between September and December 2018.

Analysis of Data

Analysis of the data obtained from the study was performed using content analysis techniques. The pictures drawn by the participants were evaluated by the researcher in light of some keys in the Non-existent Animal test. These keys included the originality of the drawn picture; general state of the lines; state of the animal organs drawn, such as head, eyes, ears, feet, arms, wings, thorns, antennas; and life style of the animal. When analyzing the data, some features of drawn pictures, such as; the thickness and the thinness of the lines; whether the lines were erased and the size of the drawn shapes, give valuable information about the participants' current psychological state. Before conducting the test to the participants, the test was subjected to the opinions of a professional who had PhD in psychology and had

experience in projective tests which have aim of interpreting the drawn figures, pictures, symbols and metaphors. Considering the expert's opinion, the last version of the test was conducted to the participants. This test was also examined in accordance with the structure and language issues in order to minimize the face validity of the test. After gathering the data from the participants, each participant's drawing was analyzed by two researchers, one of whom had experience in analyzing the projective tests. The other researcher was the author of this study. After the discussions regarding the analyses of the drawings, the results were presented according to the final consensus between the researchers.

Research Design

The study which carried out the assessment of the pictures drawn by adults through the "Non-existent Animal" projective test according to gender is a qualitative study in the screening model. In this model the phenomena are demonstrated in a holistic way in a natural environment. For this purpose, data were collected through the interview method in this study (Karasar, 2003; Yildirim & Simsek, 2005).

Findings

Originality of the drawn pictures

The pictures drawn by the participants were evaluated in terms of originality. Here, originality refers to the uniqueness of the drawn animal; it does not look like real animals. Originality level in the Non-existent Animal test expresses the creativity level and imagination of an individual. Especially realistic people have difficulty in drawing a non-existent thing. The "Non-existent Animal" pictures drawn commonly might not resemble any real animals, but they include standard organs in terms of structure; in other words, a horizontally placed body, eyes, mouth, head and the limbs (feet, legs, arms, wings, or tail). Many of them may also have some details such as ears, nose, neck, fins, or trunk that belong to in real animals. The pictures that are evaluated as original have an original idea, reminding of no other animals, and not resembling a human or a robot or any other animal.

81 female and 73 male adults participated in the study. When the pictures are analyzed, 7 of 73 pictures drawn by males have original features, while 24 of 81 pictures drawn by women have original features. According to this result, it is concluded that the females are more creative than the males, and the males are more realistic than the females.



Figure 1. Sample Original Picture (Female, 21).

Analysis of the Pictures According to Picture Size

When the pictures are evaluated in size, the pictures placed on 1/4 of the A4 paper are considered as small, and the pictures placed on all or at least 3/4 of the A4 paper are accepted as large images. The pictures that are placed in the middle of the A4 size paper are considered as "normal".

Big pictures indicate activeness, impulsivity, high self-perception, stubbornness, sociability, selfishness, energy, excitement, and self-confidence. Small pictures indicate passiveness, shyness, affectivity, fear of taking risks, indecision, dependency, and lack of self-confidence (Bahcivan Saydam, 2004; Yavuzer, 1992). When the pictures are examined, 27 of the 73 pictures drawn by males are evaluated as large and 19 are evaluated as small images. 9 of the 81 pictures drawn by females are accepted as large and 38 as small images. These results indicate that the males are more impulsive while the females are more controlled.



Figure 2. Sample Big Picture (Male, 22).

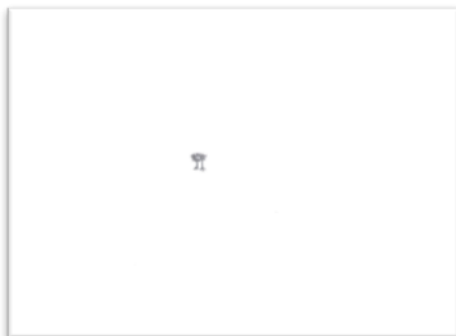


Figure 3. Sample Small Picture (Female, 22).

Analysis of the Pictures According to the Lines

State of the lines in the pictures gives important clues about the individual who draws that picture. Thin, indefinite and weak lines indicate timidity, shyness, passivity, and over-monitoring. Too thick and significant lines indicate emotional tension and impulsivity. If the paper is ripped because of the pressure of drawing, it reflects conflict, aggressiveness or hyperactivity (Alibal, 1974; Bahcivan Saydam, 2004; Mukba et al., 2018; Shevchenko, 2014; Venger, 2007). When the pictures, obtained for the study, were examined according to their lines, 12 of the 73 pictures drawn by males were evaluated as thin and 17 as thick lines. 25 of the 81 paintings drawn by females were accepted as thin lines and 17 as small thick lines.

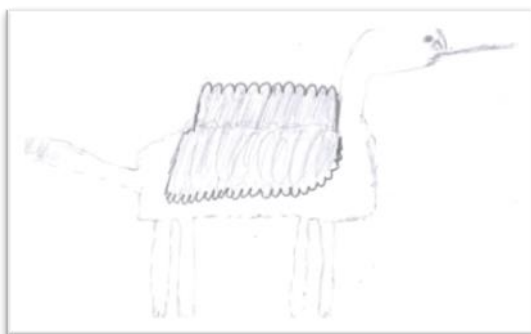


Figure 4. Sample Picture with Thin Lines (Female, 22).

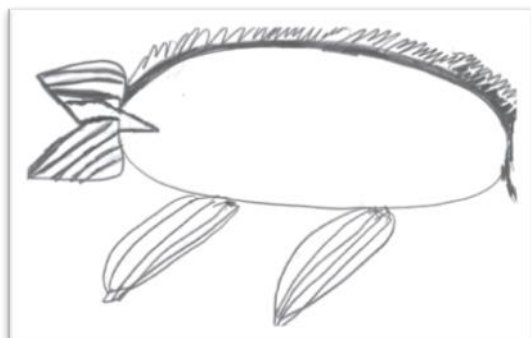


Figure 5. Sample Picture with Thick Lines (Male, 22).

Analysis of the Non-existent Animal Pictures According to the Type of Head

Head is a symbol of intellectual and mental abilities in people. Head of the non-existent animal drawn symbolizes thinking. If the non-existent animal drawn has more than one head, this case indicates the individual's inner conflicts. It refers to both inner conflicts and the conflict experienced by the individual with his/her environment. There might be two options that cannot be chosen. There may be something he has difficulty in making decisions (Venger, 2007).

The analysis of the pictures according to the lines showed that, 7 out of 73 pictures drawn by the males had more than one head. As for the females, 15 out of 81 non-existent animals drawn were found to have more than one head. This finding, based on the assumption given above, indicates that women are more indecisive than men.

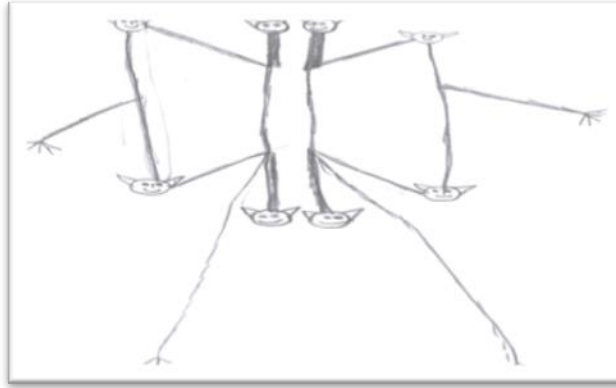


Figure 6. Sample Picture with Multiple Heads (Female, 22).

Analysis of the Non-existent Animal Pictures According to the Number of Eyes

Eyes symbolize not only vision but also emotions. Highlighted eyes are the indicators of being deliberate, restless, anxious, and fearful (Venger, 2007). Analyses showed that 30 animals drawn by the females had more than two eyes while only 10 pictures drawn by the males had more than two eyes. Based on the assumption stated above, this finding demonstrates that women are more deliberate, anxious and fearful in comparison to men.

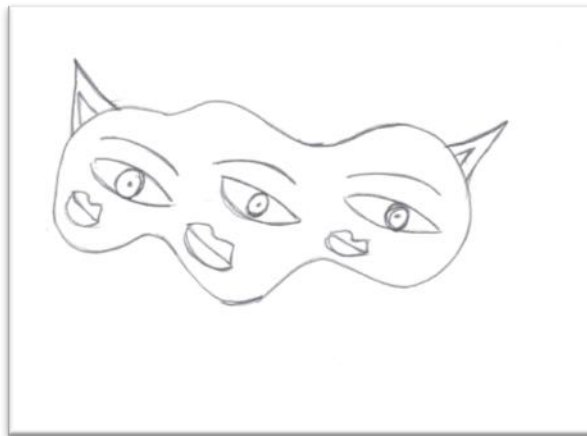


Figure 7. Sample Picture with Multiple Eyes (Female, 22).

Analysis of the Non-existent Animal Pictures According to its Ability to Fly

An animal with the ability to fly is common in the Drawing a Non-existent Animal test. A wing symbolizes independency, desire to realize oneself, being more active and effective in daily life, and having a say in one's own life. Another meaning of wing is the tendency for exhibitionism, pretentiousness and drawing attention to self (Malchiodi, 1998; Shevchenko, 2007; Venger, 2007). When the pictures drawn by the men participating in the research are examined, 35 of 73 animals are flying animals. 25 of the 83 animals drawn by women are flying animals. According to the findings, male participants (about half of them) drew more non-existent animals with wings compared to female participants. Therefore, since the wings symbolize the independency, desire to realize oneself, being more active and effective in daily life, the finding of this study shows that the male participants represent their feelings of independency in their current surroundings. In addition, they saw themselves more active and effective in their daily life and in their lives.

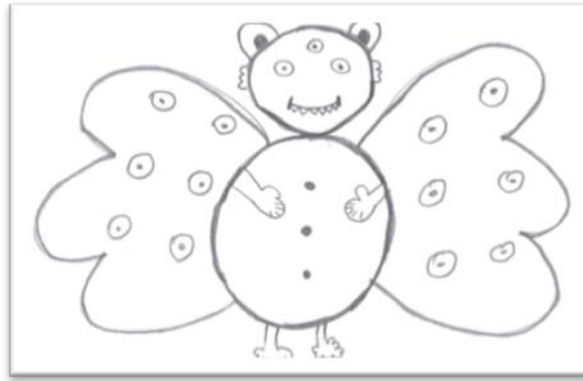


Figure 8. Sample Animal That Can Fly (Female, 22).

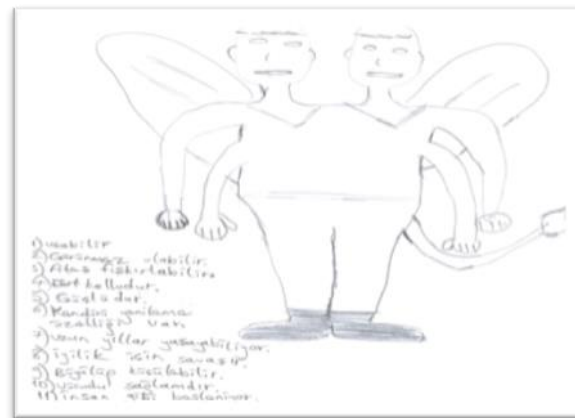


Figure 9. Sample Animal That Can Fly (Male, 22).

Analysis of the Non-existent Animal Pictures According to the Number of Feet

Feet in the Drawing a Non-existent Animal test symbolizes children’s “power to survive”. The smaller the feet are, the less confident the individual feels. If the number of feet is more than four in the picture drawn, it symbolizes the desire for being self-sustained, independent, and strong (Batov, 1991; Ivanova, 1998; Venger, 2007).

When the pictures are examined, it is seen that 10 of 71 animal pictures drawn by males have more than four feet. More than four feet were drawn in 28 of the 81 paintings drawn by females. In line with this result, it is possible to say that females desire to be more independent than males.

Analysis of the Non-existent Animal Pictures According to the Number of the Arms

Arms and hands symbolize communication with the environment. Very big arms indicate the need for attention and communication. Short arms refer indecision, insufficiency in communicating, and weakness. In addition, arms are considered as physical power and desire to gain control (Halmatov, 2016; Venger, 2007).

When the pictures are examined, more than two arm pictures were drawn in 5 of 73 pictures drawn by males, while 22 of 81 pictures of females were drawn with more than two arms. Considering the assumptions about arms, it is possible to say that females emphasize physical strength more than males. It is seen that the clues that symbolize the need to be stronger, the desire to gain control, the need for attention and communication are more in the picture drawn by females.



Figure 10. Sample Picture of an Animal with Multiple Arms (Female, 22).

Analysis of the Non-existent Animal Pictures According to Self-Defense

According to Venger (2007), horns, nails, paws, hooves, sharp beaks, teeth, sharp extensions, needles, quills, thick skin, thick shells, and thick scales are the signs of aggression. If the sharp organs such as horns, nails, and paws are in the animal's head, arms and feet and generally in the front part of the body, it indicates proactive aggression. If the sharp organs such as horns, nails and paws are generally at the back of the body or in all parts of the body (like porcupine), it points out reactive aggression (Stepanov, 2004; Venger, 2007).

When the pictures are examined, only 8 of the pictures drawn by males have signs that symbolize defense such as thorns, needles and sharp extensions. In the pictures of females, these clues were found in 28 animals. Based on this finding, it is possible to say that females need more self-defense compared to males.

Analysis of the Non-existent Animal Pictures According to Life Styles

In the Draw a Non-existent Animal test the participants are asked to express the life style of the animal they drew after they had finished drawing. When it is used with children, children are asked some questions about the animals drawn. For instance;

- Is this animal aggressive?
- What name would you choose for this animal?
- What does it eat?
- Who does it live with? What kind of a place does it live in?
- What are the three wishes it wants to realize?
- Does it have friends and enemies?

In this study, the participants were asked to write down the life style of the animals they drew on the back side of the paper. These statements were then analyzed one by one and divided into two groups as "positive life style" and "negative life style". The fact that the drawn animal is harmless, domestic, cute and beneficial has been accepted as a "positive lifestyle".

When evaluated in this way, it is seen that 49 of 71 nonexistent animals drawn by males are "negative" and 24 of them are "positive". It is seen that 64 of 81 non-existent animals drawn by women are "positive" and 17 are "negative". According to this result, it is possible to say that females are more optimistic than males.

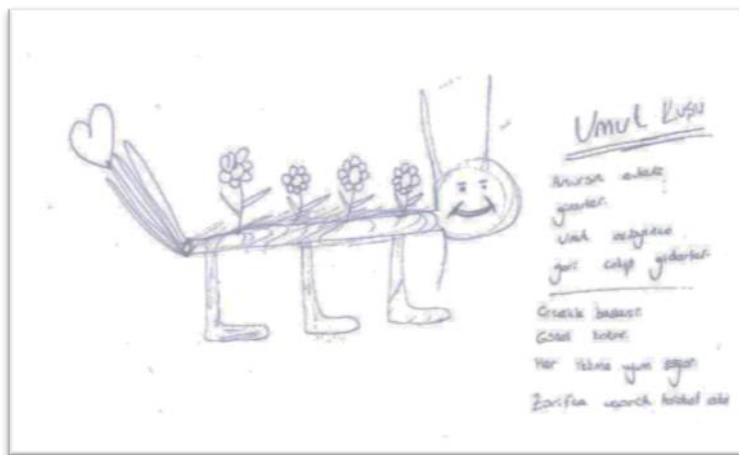


Figure 11. Sample Story for Positive Life Style (Female, 22)

"They get into the restless homes and leave when they infuse hope. They eat flowers; they smell good. They adjust to all climates. They move by flying graciously."



Figure 12. Sample Story for Negative Lifestyle (Male, 33).

"They live in a cave. They eat human meat. They live in all kinds of climates. They live 72 hours on the average; they go out at nights. Its name is Big Tongue."

Summary of the Findings

Table 1 presents the summary of the all criteria regarding the analysis. Each row indicates the analysis criteria and the number of the participants that fit these criteria, correspondingly. For example, Table 1 indicates that total of 24 female participants and 7 male participants drew original pictures regarding non-existent animals.

Table 1. Summary of the Findings regarding the Analysis Criteria

Analysis Criteria		Female (n=81)	Male (n=73)	Total (n=154)
Originality of the pictures drawn		24	7	31
According to picture size	Small	38	19	57
	Normal	34	27	61
	Large	9	27	36
According to the lines	Thin	25	12	37
	Normal	39	44	83
	Thick	17	17	34
According to the type of head	One-headed	66	66	132
	Two or more-headed	15	7	22
According to the number of eyes	One or two eyes	41	63	104
	Three or more eyes	30	10	40
According to its ability to fly		25	35	60
According to the number of feet	Four or less legs	53	63	116
	Five or more legs	28	10	38
According to the number of the arms	Two arms	61	68	129
	Three or more arms	22	5	27
According to self-defense		28	8	36
According to life styles	Negative	17	49	66
	Positive	64	24	88

Discussion

The pictures drawn by the participants were assessed in terms of the size of the picture, state of the lines, creativity levels, and general features of the animal drawn to find out the differences between the genders.

Size of the pictures drawn in the picture tests was also considered to be an important finding during the assessment. According to the evaluation criteria of the picture tests, individuals who are more active, more impulsive and in some cases aggressive draw mainly big pictures. More controlled, introverted individuals who are afraid of taking risks draw smaller pictures (Alibal, 1974; Bahcivan Saydam, 2004; Venger, 2007; Yavuzer, 1992). Of all the pictures drawn by the male participants, 27 were large, 19 were small, and 25 were normal. As for the pictures drawn by the female participants, 9 out of 81 pictures were large, and 38 pictures were small. According to the evaluation criteria of the Drawing a Non-existent Animal test, these results indicate that males are more impulsive and females are more controlled. Similarly, Farokhi and Hashemi (2011) indicated that those who draw huge images are generally aggressive

and impulsive while those who draw small images are more controlled and incompetent. Considering the meaning of the drawings, these findings support the results of this study in a way that people's ways of drawing shows their behavior of impulsiveness and incompetence.

The lines drawn in picture tests are assessed as thin, normal, and thick lines. When the pictures were assessed according to the lines, majority of both genders were found to draw pictures with "normal" lines. However, thin lines were found to be drawn mainly by the female participants. According to the criteria of the Drawing a Non-existent Animal test, drawing thin lines points out shyness, timidity, self-confidence problems, and passiveness. Since the number of female participants drawing the figures with thin lines was high, it can be interpreted that female participants were more in the mood of shyness and timidity. In addition, it can also be said that they might have self-confidence problems compared to male participants. Therefore, as expected, the findings indicate that the male participants were more active in their surroundings. These findings were supported by the Farokhi and Hashemi (2011) study, the findings of which was that the males were more energetic and had more self-confidence. Similarly, Dellate Jr and Hendrickson (1982) also showed similar results with the findings of this study, especially for male participants. They indicated that there was a close relationship between male participants' straight and thick lines and self-esteem/self-confidence.

When the characteristics of non-existent animals drawn for the study were evaluated, there were some differences between the pictures drawn by males and females. For instance; animals with more than one head were seen more in the pictures drawn by the female participants. Similarly, animals with more than two eyes were found to be drawn mainly by the female participants. As for the males, they drew more animals that could fly in comparison to the females. Animals with more than four feet were seen mainly in the pictures drawn by the females. While the number of the pictures with multiple arms (more than two) was 5 in the pictures drawn by the males, this number was 22 in the pictures drawn by the females.

Non-existent animal pictures with signs that symbolize defense such as thorns, needles, and sharp extensions are more in the pictures drawn by females. An analysis of the non-existent animal pictures in terms of life styles showed that 49 out of 71 non-existent animals drawn by the males had "negative" and 24 had "positive" life styles. As for the females, 64 out of 81 non-existent animals had "positive" and 17 had "negative" life style. According to this result, it is possible to say that females are more optimistic than males.

In a similar study by Sherbatyh (2003) females were observed to draw ornaments such as bracelets, buckles and necklaces more than males. The researcher concluded that the females gave more importance to details, and their desire to attract attention was more in comparison to the males. In the same study, it was seen that the picture of beak, which was accepted as a hint of aggression, was drawn more by males and females did not draw beaked animals at all.

Another study showed that the picture of an ear, which is interpreted as "giving importance to others' ideas", was two times more in the pictures drawn by the females. In addition, females were found to draw extensions such as feather, needle, and hair more. In the same study, females were found to draw pictures of eyes more in comparison to males (Sherbatyh, 2003, 2016).

Another study conducted by Mukba et al. (2018) that utilized the "Draw a Cactus" projective test noted differences between the pictures drawn by males and females. The study found that some of the female participants and all of the male participants drew a wild cactus picture rather than a pot. According to the assessment criteria of the test, cactus pictures in a pot and cactus with roots are associated with being home-loving; and desert cactus, cactus with no roots, and wild cactus pictures are considered to be associated with being independent (Mukba et al., 2018).

Conclusion

In conclusion, males and females, who are different from each other in terms of many aspects, demonstrated important differences in the pictures they drew for the Drawing a Non-existent Animal Test. According to the findings of this study, it indicates that the pictures drawn by the males and females demonstrated important differences between each other in terms of various aspects. When the pictures drawn for the test were analyzed in terms of originality, the females were found to draw more original pictures. According to the assessment criteria of the Non-existent Animal test, original pictures are mainly drawn by creative people who have good imagination and who are emotional. People who look at events in a more realistic way, who have limited imagination, and who are strict and stubborn mainly draw pictures that look like the existing animals. Taken together, it is possible to say that women are more creative and males are more realistic.

Suggestions

Despite the fact that projective tests lead to discussions in terms of their validity, reliability, and objectivity, they have an important place in psychological assessments. Projective tests analyzed carefully by professionals usually provide more in-depth information than standard tests. Projective tests can be more effective especially when there is a problem about verbal expression or resistance (Aleksandrova, 1999; Alibal, 1974; Amundson, 2012). On the other hand, considering the essential use of projective tests in the field of psychiatry, future studies on the reliability of the

projective tests are recommended. The findings of this study suggest that the Drawing a Non-existent Animal test can be used as an assessment tool in gender studies in the field of behavioral science.

Limitations

Limitations of this research; the entire study group of the research consists of students between the ages of 19-24 who continue their university education. It is also used in the analysis of the data obtained from the research, although it is widely used in Russia, and it is evaluated in light of some keys in the Non-existent Animal Test, which is not known much in other countries.

References

- Aleksandrova, Y. (1999). Postroenie validizatsia proektivnoi metodiki dla dagnostiki otnoshenie k drugomu cheloveku [The validity and reliability of the projective technique, which evaluates the individual's level of communication with someone else]. *Psychology Journal/ Psihologicheskii Jurnal*, 3, 111-118.
- Alibal, M. (1974). Projektif testlerle kisilik degerlendirmesi: Ozellikler ve materyal [Personality evaluation with projective tests: Features and material]. *Ankara University Journal of Faculty of Educational Sciences / Ankara Universitesi EgitimFakultesi Dergisi*, 7(1), 193-209. https://doi.org/https://doi.org/10.1501/Egifak_0000000409
- Amundson, N. E. (2012). Using projective assessment techniques in career counselling. *Canadian Journal of Counselling and Psychotherapy*, 13(4), 225-229.
- Bahcivan-Saydam, R. (2004). Cocuk cizimlerinin klinik degerlendirmedeki yeri [Children drawing in clinical evaluation]. *Reflection: Journal of Psychopathology and Projective Tests/ Yansitma: Psikopatoloji ve Projektif Testler Dergisi*, 1(1-2), 111-124.
- Batov, V. (1991). *Lichnostnoe v risunke: Voprosyagnostiki* [Differences on personality: Diagnostic issues]. Iskustvo i Emotsii/ Emotion Art.
- Dellate Jr, J. G., & Hendrickson, N. J. (1982). Human figure drawing size as a measure of self-esteem. *Journal of Personality Assessment*, 46(6), 603-606. https://doi.org/10.1207/s15327752jpa4606_8
- Dukarevich, M. Z., & Yan'shin, P. V. (1990). Risunok nesushchestvuyushchego zhitovnogo [The drawing of a non-existent animal]. In A. I. Zelichenko, I. M. Karlinskaya, S. R. Pantileev et al. (Eds.) *Praktikum po psikhodiagnostike. Psikhodiagnostika motivatsii i samoregulyatsii* [Practical course in psychodiagnosics. psychodiagnosics of motivation and self-regulation] (pp. 54-73). Moscow University Press.
- Ermolenko, P. (2017). *Sravneniye mujshin i jenshin v proektivnoi metodike "risunok nesushchestvuyushchego zhitovnogo" i v teste bassa-darkina agressiyu* [Comparison of men and women in the projective technique "drawing of a nonexistent animal" and in the bass-darka test for aggression] [Paper presentation]. Psychology of The 21st Century: Theory, Practice, Materials Conference, Prague, Czech Republic.
- Farokhi, M., & Hashemi, M. (2011). The analysis of children's drawings: social, emotional, physical, and psychological aspects. *Procedia - Social and Behavioral Sciences*, 30, 2219-2224. <https://doi.org/10.1016/j.sbspro.2011.10.433>
- Gabidulina, S. E. (1986). K obosnovaniyu metodiki "risunok nesushchestvuyushchego zhitovnogo" [On the feasibility of the technique "non-existent animal"]. *The Moscow University Herald. Series 14. Psychology / Vestnik Moskovskogo Universiteta. Seriya 14. Psikhologiya*, 4, 56-67.
- Halmatov, S. (2016). *Cocuk resimleri analizi ve psikolojik resim testleri* [Child pictures analysis and psychological picture tests]. PegemAkademi.
- Ivanova, T. (1998). Izuchenie etnicheskikh stereotipov s pomoshyu proektivnih risunkov [Determining the characteristics of ethnic groups with projective drawing tests]. *Voprosipsihologii/ Psychologica Issues*.
- Karasar, N. (2003). *Bilimsel arastirma yontemleri* [Scientific research methods](12nd ed.). Nobel.
- Korner, A. (2000). *Teoreticheskoe isledovanie predelov vozmojnostei proektivnih metodik* [Investigation of effectiveness limits of projective techniques]. ProektivnaiaPsihologia/ Projective Psychology.
- Malchiodi, C. A. (1998). *Cocukların resimlerini anlamak* [Understanding child drawings]. Epsilon.
- Mukba, G., Kaya, Z., & Ozkan, R. (2018). "Bir kaktus resmi ciz testi" araciligıyla psikolojik danisman adaylarının kisilik ozelliklerine ve duygu durumlarına iliskin goruslerinin incelenmesi [A research on the opinions related to the personality traits and affect-states of psychological counsellor candidates through "draw a picture of cactus test"]. *Life Skills Journal of Psychology*, 2(4), 389-397.
- Sherbatyh, Y. (2003). Naskolko metod tsvetovih viborov luschera izmeryaet vegetativnii komponent trevogi? [Evaluating the effectiveness of the luscher color test in determining anxiety level]. *Practical aspects of medicine / Prikladnie Informatsionnie Aspekti Meditsini*, 5, 108-113.

- Sherbatyh, Y. (2016). Problema otsenki validnosti proektivnogo testa "risunok nesushestvuyushogo jivotnogo" [Examine the level of reliability of the non-existent animal draw test]. *Bulletin of Pedagogy and Psychology of Southern Siberia / Vestnik Po Pedagogike i Psihologii Yujnoi Sibirii*, 4, 112-117.
- Shevchenko, M. (2007). *Risuyu uspehi zdorovie* [Picture of health and success]. ArtterapiadlaVseh/ Art Therapy for Everyone.
- Shevchenko, M. (2014). *Psihologicheskie risuniochnie testi dla detei i vzroslih* [Picture tests for kids and adults]. Kladez.
- Stepanov, S. (2004). *Diagnostika intelekta metodom risunochnogo testa* [Measuring and putting intelligence with picture tests]. MetoSfera.
- Talu, E. (2019). Reflections of fears of children to drawings. *European Journal of Educational Research*, 8(3), 763-779. <https://doi.org/10.12973/eu-jer.8.3.763>
- Tsuladze, S. (1969). *O meste i znachenie proektsionnih metodov v izuchenie lichnosti* [The place and importance of projective tests in determining personality]. Problemi Lichnosti/ Personality Problems.
- Venger, A. (2007). *Psihologicheskie risunochnie test* [Psychological picture tests guide]. In A. Venger (Ed.), *Ilyustrirovannoe Rukovodstvo/ Visual Guide*. Vlados-Press.
- Yavuzer, H. (1992). *Resimleriyle cocuk* [Child with pictures](5th ed.). Remzi.
- Yildirim, A., & Simsek, H. (2005). *Sosyal bilimlerde nitel arastirma yontemleri* [Research methods in social sciences](5th ed.). Seckin.