Implementation of the psychosemantic method “color-associative experiment” in psychological counseling of students

Svitlana Kucherenko¹*, and Tatiana Pavliuk²

¹ V.I. Vernadsky Crimean Federal University, Yalta, Crimea, Russia
² V.I. Vernadsky Crimean Federal University, Armiansk, Crimea, Russia

Abstract. The article presents an example of personality research with the help of the author’s psychosemantic technique “Color-associative experiment”, which is a combination of the method of free associations by C.G. Jung and the eight-color subtest by M. Lusher. In qualitative and quantitative data processing and interpretation, free and axial coding techniques are used, thanks to which the psychologist can get a complete impression of the current state of the respondent. These two projective techniques of grounded theory are the reason we can formulate now grounded psychodiagnostic conclusions in a consulting process. In the described examples of implementing the “Color-associative experiment” method, both respondents (a first-year master's student and a final-year bachelor's student) are characterized as a neurotic personality with an overestimation (or super-value) of the desire to achieve success.

1 Problem statement

In psychodiagnostics, there are a huge number of techniques that require a specific time for their implementation. In a situation of limited time, methods and techniques allowing to get an idea of the whole personality in the shortest possible time are required. Among these methods Kucherenko S.V. developed a psychosemantic technique “Color-associative experiment” which is a synthesis of the associative experiment of C.G. Jung [1, 3, 9, 10, 11] (the method of free and directed stream of associations) and the test of M. Lusher [5, 12, 14], or rather, its eight-color subtest. The difficulty of interpreting this technique is that it relates to projective or qualitative methods and are based on an ideographic approach to personality research, and opposed to quantitative methods, such as testing in the nomothetic approach. Qualitative methods require special methods and techniques for interpreting the results.

In the grounded theory approach, the data analysis procedure is described by A. Strauss and J. Corbin [6]. There are three types of encoding: open, axial, and selective [2].

* E-mail: kusvitlana@gmail.com

© The Authors, published by EDP Sciences. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (http://creativecommons.org/licenses/by/4.0/).
Purpose of the article is to consider the possibilities of using color-associative experiment in the practice of psychological counseling. The analysis of qualitative data was carried out with the help of open, and subsequently axial coding.

2 Methods

The method of free associations of C.G. Jung was supplemented by an eight-color subtest of M. Lusher [5, 12, 14].

To determine the system of individual meanings and personal values, as well as the leading personal traits of students at the initial stage of psychological counseling, the method “color-associative experiment” was used (modified version of S. V. Kucherenko). This method is a modification of the associative experiment proposed by C. G. Jung [9, 10; 11] in combination with the Color test of relations by E. F. Bazhin and A. M. Etkind [7, 8]. In contrast to the “associative chain array” method [4], the color-associative experiment involves the interpretation of semantic units based on their emotional content which is correlated with the color array of the eight-color test by M. Lusher. The analysis of the color-associative array is based on the values of eight colors described by M. Lusher [5, 12, 14]; the analysis of the associative chain array is performed with the help of the encoding procedure proposed by A. Strauss and J. Corbyn [6]. A. Strauss and J. Corbin identifies three types of encoding: open, axial, and selective [2, 6]. Open coding is to categorize phenomena; axial coding deals with establishing the axis that groups all key categories around. Categories are linked by the following system [2]: 1) the conditions that lead to the phenomenon, 2) the phenomenon itself, 3) its properties that create the context, 4) strategies for interacting with the phenomenon, 5) consequences. Selective coding is aimed at searching for the subthemes or episodes that most clearly illustrate the main theme. As a result, there is a movement from descriptions to conceptualization. The central category connects with the rest through a “paradigm”. For example, A (conditions) lead to a B (phenomenon), which occurs in the C (context) that leads to D (actions or interactions, including strategies) that subsequently leads to E (consequences). In this way, we get a conceptualized description of the phenomenon we are interested in and also we get to know prevailing individual meanings and personal values in the client’s mind.

The methodology includes three stages. At the first stage, the student is asked to write 50-100 words, “all that “come” to mind”. At the second stage, he is asked to first rank the color cards of the eight-color M. Lusher subtest in order of preference, after that to select associations for each of them, and then re-rank the colors. At the third stage, the color-associative array is analyzed and the procedure for encoding the obtained associations is performed.

3 Results

Psychological counseling was conducted with graduate students (25 people) on the basis of Academy of Humanities (branch) of V.I. Vernadsky Crimean Federal University in Yalta.

Let’s consider the example of an express personality research of M. Ya. by the author’s psychosemantic method “Color-associative experiment”. Color ranking of the eight-color M. Lusher’s subtest: 35471260; the second ranking is similar to the first: 35471260. Based on the interpretation of the eight-color test by M. Lusher the diagnostic structure of the personality looks like this: ++3, +4, =1, =2. The overrated structure, in this case, the Lusher’s red (;++3), is expressed in the use of everything possible to achieve success (in the original it is called “the pursuit of conquest”). Thus, the whole personality structure based on the results of the eight-color Lusher’s subtest includes reassessment of the desire for
success and some disregard for self-respect. This tendency is similar to the personality profile of M. Lusher ++3 -2 «propagandist».

In this color array the most preferred are 3 and 5 (“++” in this choice of colors red and crimson), preferred – 4 and 7 (“+” yellow and black), indifferent – 1 and 2 (“=” blue and green), rejected – 6 and 0 (“−” brown and gray):

1. career (4); 2. work (4); 3. children (3); 4. freedom (5); 5. team (3); 6. car (1); 7. microphone (7); 8. fun (2); 9. communication (5); 10. family (3); 11. creativity (4); 12. sports (7); 13. animals (6); 14. love (5); 15. relationships (3); 16. joy (4); 17. realization (5); 18. self-esteem (7); 19. inspiration (4); 20. energy (1); 21. goals (3); 22. reading (6); 23. travel (4); 24. cat (3); 25. confidence (5); 26. home (3); 27. achievements (1); 28. beauty (4); 29. creation (3); 30. breakthrough (7); 31. success (2); 32. weather (1); 33. tenderness (0); 34. happiness (5); 35. victory (3); 36. sex (4); 37. development (7); 38. stairs (5); 39. growth (1); 40. travel (0); 41. loved ones (3); 42. cooking (5); 43. personal space (1); 44. respect (4); 45. money (5); 46. car (4); 47. dream (3); 48. furniture (3); 49. spot (3); 50. world (4); 51. artist (5); 52. dancing (7); 53. drawing (5); 54. performance (7); 55. education (3); 56. meetings (4); 57. friendship (1); 58. memory (5); 59. benefit (3); 60. dot (1); 61. think (4); 62. path (5); 63. forget (7); 64. stress (0); 65. embody (5); 66. manage (6); 67. achieve (1); 68. stability (4); 69. boyfriend (3); 70. tenderness (4); 71. rest (7); 72. table (2); 73. view (2); 74. sleep (0); 75. vacation (4); 76. write (3); 77. walk (4); 78. laugh (1); 79. fruit (4); 80. coffee (3); 81. notepad (3); 82. prosperity (4); 83. tears (3); 84. book (4); 85. recognition (7); 86. weather (4); 87. health (5); 88. nobility (1); 89. care (5); 90. family (3); 91. cell (3); 92. brothers (4); 93. support (5); 94. walking (1); 95. ring (4); 96. smile (3); 97. love (7); 98. aspiration (5); 99. firmness (7); 100. beginning (6).

Categories: family (14 words: children, family (occurs twice in the stream, so it is a loaded incentive), love, relationships, loved ones, boyfriend, care, ring, animals, tenderness, support, cell, cat); work (12 words: team, communication, realization, goals, career, work, microphone, performances, money, achievements, success, stairs); needs (10 words: personal space, communication, friendship, sex, development, rest, sleep, education, reading, stability); creativity (10 words: inspiration, creation, freedom, notepad, tears, coffee, artist, drawing, energy, dot); self-respect and respect from others (8 words: confidence, self-esteem, respect, to manage, stress, growth, nobility, beauty); duties (infinitives of 8 words: achieve, be able, laugh, think, forget, walk, write, embody); material security (7 words: prosperity, money, car, furniture, table, spot, house); physical actions and movement in space (6 words: walking, dancing, sports, cooking, travel and trip); emotions (5 words: smile, joy, happiness, fun, stress); words without categories (5 words): start, sleep, peace, firmness, weather.

According to M. Lusher, the most preferred colors, which stand at the very beginning of the individual color array, express the super-goals (+++) of the individual, that is, compensatory behavior in conditions of an intrapersonal conflict, or values and goals that are known and demonstrated to others in the absence of such. In this case, the true or real goals of the individual express the preferred colors (“+”).

Table 1. Distribution of the free stream of associations of the respondent M. Ya. according to their emotional load.

| Super goals (++) | Preferred (+) | Indifferent (=) | Rejected (-) |
|------------------|---------------|----------------|--------------|
| Children         | career        | car            | animals      |
| freedom          | work          | fun            | reading      |
| team             | microphone    | energy         | tenderness   |
| communication    | creativity    | achievements   | Trip         |
| family           | sports        | success        | stress       |
| love             | joy           | weather        | be able to   |
| Super goals (++) | Preferred (+) | Indifferent (=) | Rejected (-) |
|-----------------|---------------|----------------|-------------|
| relationships    | self-assessment | growth          | sleep       |
| realization      | inspiration    | Personal space  | beginning   |
| goals            | travel         | friendship      |             |
| cat              | beauty         | dot             |             |
| confidence       | breakthrough    | reach           |             |
| home             | sex            | table           |             |
| creation         | development    | view            |             |
| happiness        | respect        | laugh           |             |
| victory          | car            | nobility        |             |
| stairs           | world          | walking         |             |
| loved ones       | dancing        |                 |             |
| cooking          | performances   |                 |             |
| money            | Meetings       |                 |             |
| dream            | Think          |                 |             |
| Furniture        | forget         |                 |             |
| spot             | stability      |                 |             |
| artist           | tenderness     |                 |             |
| drawing          | rest           |                 |             |
| education        | holidays       |                 |             |
| Memory           | walking        |                 |             |
| use              | fruit          |                 |             |
| way              | wealth         |                 |             |
| Embody           | book           |                 |             |
| Guy              | recognition    |                 |             |
| write            | weather        |                 |             |
| coffee           | brothers       |                 |             |
| notepad          | ring           |                 |             |
| tears            | love           |                 |             |
| Health           | Hardness       |                 |             |
| care             |                |                 |             |
| family           |                |                 |             |
| cell             |                |                 |             |
| support          |                |                 |             |
| smile            |                |                 |             |
| aspiration       |                |                 |             |
| Categories:      | Categories:    | Categories:     | Categories: |
| Family, self-esteem, career, creativity, duties | Work, physical activities, family, needs, duties, creativity | Emotions, duties, needs, work, respect, creativity, physical activities | Need, moving in space, emotion, family, duty |
| Common feature: | Common feature: | Common feature: | Common feature: |
| Striving for fulfillment in the family and creativity/achieving success (M. Lusher) | Physical and mental activity/desire, hope and expectation (M. Lusher) | Indifference to someone own’s needs/credulity, peace-loving (M. Lusher) | Rejection of attachment/requirement of competence and self-importance (M. Lusher) |
As can be seen from table 1, most respondent's words in the free stream of associations relate to the category “family” and are the most preferred by the color test of relations (“+” according to M. Lusher). The categories “work” and “needs” are also relevant and mostly goes into the preferred group (“+” according to M. Lusher). Among the indifferent and rejected incentives, there are many words from the categories of duty, “needs”, “emotions”, “moving in space” and even “family”. Thus, the primacy of duties to emotions and inattention to own needs (namely, the needs for personal space, friendship, sleep and reading) makes it possible to put forward a psychodiagnostic hypothesis about ambivalent attitude to the family.

In the conversation with the respondent, we came to the conclusion about the key category of creativity and emotions, among which the last one is neglected and deserves more attention. This is accepted as one of the therapeutic strategies for supporting the career development of this person. In general, the respondent is focused on a creative work with children and we can say that work is currently perceived as a duty, because the preferred incentives are dominated by duty. Thanks to the technique of axial coding as a method of interpretation of the categories obtained empirically, we get the following results. The studied phenomenon of "meaningful relationships", which can include work, family, and creativity, occurs and proceeds in the conditions of duty, which leads to indifference to one's own needs and as a result leads to neglect of sleep, stress, and rejection of attachment. Based on the obtained diagnostic data, it is possible to formulate the goals of subsequent psychological counseling of a student (in this case, a first-year master's degree).

Let's consider the example of qualitative data analysis with the help of open and axial encoding. The free stream of associations of the respondent A. S. is shown below.

```
Ranking # 1: 3, 5, 2, 7, 6, 1, 4, 0. After assigning colors to phrases by the respondent we get the next ranking # 2: 5, 3, 2, 7, 6, 4, 1, 0. Thus, we can divide the respondent’s associations into four groups according to the degree of preference for colors in the M. Lusher subtest [4]: the most preferred (“+”, in this choice it is 3 and 5, that is, Lusher’s red and purple), preferred (“X”, 2 and 7, that is, Lusher’s green and black), indifferent (“=”), 6, 4 and 1, that is, brown, yellow and blue), rejected (“‒”, 0 or Lusher’s gray). The specificity of this individual color choice is expanding the zone of indifference and reducing the number of rejected colors.
```

Based on the interpretation of the eight-color test By M. lusher, in this color series there is a neurotic re-evaluation of the same basic personality structure (++3). The diagnostic structure of personality according To M. Lusher looks like this: ++3, +2, =4, =1. for this undergraduate student of the final year, it is also extremely important to use everything possible to achieve success (in the original, M. Lusher's "striving for conquest"). Thus, the integral structure of the personality according to the results of the eight-color lusher subtest includes a re-evaluation of the desire to achieve success and a certain disregard for peacefulness, which is experienced as dissatisfaction.

1) Cheerful person (3+). 2) Beautiful sunset (5+). 3) Delicious dinner (2X). 4) Light mattress (2X). 5) Warm hugs (5+). 6) Beautiful illustrations (5+). 7) Map of the starry sky (5+). 8) Room confinement (1–). 9) Time with benefits (5+). 10) Joyful meeting (5+). 11) Sea breeze (5+). 12) Fresh air (5+). 13) Long-awaited walk (5+). 14) Happy dog (5+). 15) Plowed field (3+). 16) Cleaned room (3+). 17) Ordered thoughts (5+). 18) Full beach (7 x). 19) Mountain travel (3+). 20) Underwater world (5+). 21) Recorded audio podcast (7 X). 22) Benefit to people (5+). 23) Completed exercise (7 X). 24) Independence (7 X). 25) Hexagon cube (6 –). 26) Road designer (7 X). 27) Morning wake-up (3+). 28) Interesting activity (3+). 29) Delicious drink (2 x). 30) Purring cat (5+). 31) Assembled puzzle (2X). 32) Beautiful pattern (2X). 33) Interesting story (2X). 34) Search for the path (2 x). 35) Performed play (5+). 36) Melodic notes (5+). 37) Developed hands (3+). 38) Useful ideas (2X). 39) Unsinkable ship (2 x). 40) Life path (3+). 41) Successful goal (3+). 42) Inner
feelings (7 x). 43) Changeable weather (6 =). 44) Useful self-examination (7 X). 45) Defeated winner (1 =). 46) Empty room (1 =). 47) Irrevocable path (0 -). 48) The right thing to do (2 X). 49) Life from a different angle (7 X). 50) Freedom and ease (5 +). 51) Interest and benefit (2 X). 52) Warm sun ray (2 x). 53) Fresh earth (5 +). 54) Morning dew (3 +). 55) Warm wind (3 +). 56) Refreshing breeze (5 +). 57) Search for an interlocutor (7 x). 58) Ridiculous improvisation (2 x). 59) Hard work (3 +). 60) Pleasant rest (7 x). 61) Free person (5 +). 62) Happy child (5 +). 63) Understanding girl (2 X). 64) Caring wife (2 X). 65) Sensual world (7 X). 66) Change of day and night (6 =). 67) Benefits in small things (2 X). 68) Pleasant tone (2 X). 69) Adult act (3 +). 70) Distrustful prince (1 =). 71) Empty maze (0 –).

Next, we implement open encoding procedures, followed by axial encoding. In this case, we get two possible interpretations. These are the topics (categorization # 1):

1) Man, human life – 17 words, including +10; X3; =3; –1.
2) Nature – 17 words, including +14; x1; =2.
3) Relationships – 12 words, including +2; X5; -5.
4) Art / pleasure – 20 words, including +8; X10; =1; -1.

1) Use, knowledge – 13 words, including +7; X6.

Categorization (open coding) # 2:

1) emotions, feelings 11 (+7; x4)
2) thoughts, knowledge 24 (+10; X10; -4),
3) actions, things 34 (+17; X15; =2);
4) material things, values 4 (+2; x2);
5) circumstances, Wednesday 15 (+4; X7; -4);
6) sensations, perceptions 40 (+10; X20; =5; -5).

As can be seen, the second categorization is more individually informative than the previous one. Sensations and actions, pleasure and art are the most relevant topics for the respondent at the moment. There are some negative attitudes in sensations, while actions, emotions and feelings do not have them. There is a certain prohibition or ignoring of negative emotions, feelings and attitudes to the activity. In other words, actions, emotions, and feelings perform a compensating function based on the system of M. Lusher [4]. They compensate for the anxiety caused by sensation (see table 2).

Taking as a basis the method of axial coding let’s analyze categories’ corresponding to the following axes: conditions, phenomenon, its properties, strategy of interaction with the phenomenon and consequences. As a result, we received the following data: conditions – circumstances, environment 15 (+4; X7; -4); material things, values 4 (+2; X2); phenomenon – actions, deeds 34 (+17; X15; =2); strategy of interaction with the phenomenon – thoughts, knowledge 24 (+10; X10; -4); sensations, perceptions 40 (+10; X20; =5; -5); result, consequences – emotions and feelings 11 (+7; X4).

Thus, the interpretation for the respondent may be as follows: “in order to maintain a vigorous activity aimed at achieving results (positive emotions), I use my knowledge and sensory processes, which do not always help me achieve the goal despite the environmental conditions”. In the conversation with a respondent, we corrected suggested conclusion this way: “...they rather help, despite the environmental conditions and my fears that they will not help”.

In other words, “through relationships, art, and enjoyment, I work with my knowledge, become useful to others, and become free and independent.” The final conclusion is as follows: “...through vigorous activities aimed at achieving results, I work with my knowledge, become useful to others and become free and independent. When there is an oversupply of therapeutic strategies, there is a need to reduce their number.” After the conclusion is made by the respondent himself, we can move on to the therapeutic strategy and discuss it.
### Table 2. Distribution of the free stream of associations of the respondent A. S. according to their emotional load.

| Super goals (+ +)     | Preferred (+)       | Indifferent (=)    | Rejected (-)         |
|-----------------------|---------------------|--------------------|----------------------|
| Funny man             | Delicious dinner    | Hexagon cube       | Indoor confinement   |
| Beautiful sunset      | Light mattress      | Changeable weather | Irrevocable path     |
| Warm embrace          | Full beach          | Defeated the winner| Empty maze           |
| Beautiful illustrations| Recorded audio      | Empty room         |                      |
| Star chart            | Completed exercise  | Change of day and  |                      |
|                       |                     | night              |                      |
| Joyful meeting        | Designer of roads   | Independence       | The incredulous      |
|                       |                     |                    | Prince               |
| Sea breeze            | Delicious drink     |                    |                      |
| Fresh air             | Assembled puzzle    |                    |                      |
| Long-awaited walk     | Beautiful pattern   |                    |                      |
| Happy dog             | Interesting story   |                    |                      |
| Ploughed field        | Finding ways        |                    |                      |
| Clean room            | Useful ideas        |                    |                      |
| Ordered thoughts      | Unsinkable ship     |                    |                      |
| The trip through the mountains | Inner feelings |                      |
| Underwater world      | Useful soul-         |                    |                      |
|                       | searching            |                    |                      |
| Profit for people     | The right thing to do|                  |                      |
| Morning awakening     | Life from a different angle |            |
| Interesting activity  | Interest and benefit|                    |                      |
| Purring cat           | A warm sun ray      |                    |                      |
| Performed play        | Search for a        |                    |                      |
|                       | conversation partner|                    |                      |
| Melodic notes         | Ridiculous          |                    |                      |
|                       | improvisation        |                    |                      |
| Developed hands       | **Pleasant vacation** |                    |                      |
| Life path             | Understanding girl  |                    |                      |
| A good goal           | Caring wife         |                    |                      |
| Freedom and ease      | Sensual world       |                    |                      |
| Fresh ground          | Use in small things |                    |                      |
| Morning dew           | Nice tone           |                    |                      |
| Warm wind             |                      |                    |                      |
| Refreshing breeze     |                      |                    |                      |
| **Hard work**         |                      |                    |                      |
| Free man              |                      |                    |                      |
| Happy child           |                      |                    |                      |
| Adult act             |                      |                    |                      |
| **Categories:**       | **Categories:**      | **Categories:**     | **Categories:**      |
| Man, man's life       | Man, man's life     | Man, man's life    | Man, man's life      |
| Nature                | Art / pleasure,      | Nature             | emotions, feelings   |
|                       |                      |                    |                      |
As can be seen from table 2, a positive attitude to work is valuable for the respondent, but the current state at the time of diagnosis is the desire for rest. The source of concern for the respondent is dissatisfaction with external circumstances (the period of self-isolation). Moreover, phenomena that do not depend on the subject and the situation of uncertainty do not relate to current problems. Therefore, the recommendation for successful career development in this case is to determine the specialization related to something beautiful or to interpersonal relationships. It will lead to satisfaction from the work process and the most effective use of the respondent's capabilities.

In the conversation with the respondent, we came to the conclusion about the key category of action in its individual semantics and received understanding that it is necessary to create desirable changes in life through actions. Thanks to the technique of axial coding as a method of interpretation of the categories obtained empirically, we get the following results. The empirical phenomenon of “actions, deeds”, which can include work, University education, creativity, arises and proceeds in conditions of pleasant sensations and experiences of beauty, which leads to the absolutization of positive emotions and phenomena that are independent from the subject (fate and nature), which as a result leads to dissatisfaction with the circumstances and environment. Since the survey was conducted during the period of self-isolation and distance education of students (April, 2020), these results may be situational. However, the obtained diagnostic results allow us to develop a further line of psychological counseling for this student.

4 Conclusions

We can conclude that the author's psychosemantic technique “Color-associative experiment” is sufficiently informative at the stage of personality diagnostics, at the beginning of the consultation process with students at the University. The free coding technique allows us to analyze the qualitative data obtained with the help of the free association’s method according to C. G. Jung in combination with the eight-color subtest of M. Lusher and Color test of relations, and thus formulate further psychodiagnostic or consulting and therapeutic tasks. In the described examples of using the “color-associative experiment” technique, both respondents (a first-year master's student and a final-year
bachelor's student) are characterized as a neurotic personality structure based on the results of the eight-color M. Lusher subtest.

However, the master's student reassessment (or overvalued) of the desire for success is combined with some neglect of his competence and importance, and the undergraduate student combines it with the alienation and dissatisfaction with the current situation of distance education and a period of self-isolation.

Thanks to the technique of axial coding, a picture of the semantic space of a master's student is revealed, which includes the phenomenon of “meaningful relationships” (work, family, and creativity) that occurs and proceeds in the conditions of duty. This leads to indifference to his own needs and ends with sleep neglect, stress, and rejection of attachment in paired relationships.

In the semantic space of the undergraduate student phenomenon “actions, deeds” (work, higher education, creativity) occurs and proceeds in conditions of good feelings and wonderful experiences associated with art. It leads to the absolutizing of positive emotions and out of control phenomena (fate and nature) which brings dissatisfaction with the circumstances and environment.

The described examples of using the author's psychosemantic technique “Color-associative experiment” give an idea of its procedure and methods of interpretation in order to obtain reliable results.

The authors are grateful to Marianna Latysheva from V.I. Vernadsky Crimean Federal University for the help in the theoretical justification of the psychosemantic method «Color-associative experiment» and for participation in writing the article’s section «Methods».

References

1. E.Yu. Artemeva, Fundamentals of psychology of subjective semantics, 349 (ed. I.V. Khanina, M, Science, 1999)
2. N.P. Busygina, Methodology of qualitative research in psychology, Moscow, 304 (2017)
3. S.V. Kucherenko, T.P. Pavliuk, Research of the University Psychological Service: Career Anchors of Undergraduates and Students in the Master’s Programme in Major in the Conditions of the Higher Education, Psychological service of higher education institutions, 61-78 (2020)
4. A.Yu. Egorov, Neuropsychology of deviant behavior, 223 (Saint Petersburg, Speech, 2006)
5. M. Lusher, What color is your life. The law of harmony in us, 252 (Moscow, 2008)
6. A. Strauss, Dzh. Korbin, Fundamentals of qualitative research: grounded theory, procedures, and techniques, 256 (Moscow, Editorial URSS, 2001)
7. V.P. Tkach, Relationship color test: possible implementations in sociology, RUDN Bulletin, 3, 26-34, URL: https://cyberleninka.ru/article/n/tsvetovoy-test-otnosheniya-primeneniya-v-sotsiologii
8. A.M. Etkind, Relationship color test .and its changes in the study of patients with neuroses. Socio-psychological research in Psychoneurology, 110–114 (Leningrad, 1980)
9. D. Fryer, Doing Qualitative Research Differently: Free Association, Narrative and the Interview Method Holloway, W. and Jefferson, T., Journal of Community and Applied Social Psychology, 11, 324–327, DOI: 10.1002/casp.603.abs (2001)
10. W. Hollway, T. Jefferson, *Doing qualitative research differently. A free association, narrative and the interview method*, 166 (London, Sage, 2000)

11. W. Hollway, T. Jefferson, *The free association narrative interview method, The Sage Encyclopedia of Qualitative Research Methods*, 296-315 (California, Sage, 2008)

12. M. Luscher, *The Luscher color test*, 224 (Translated and edited by Ian A. Scott. N.Y., Washington square press, 1971)

13. K. Charmaz, *Constructing grounded theory: a practical guide through qualitative analysis*, 208 (Leningrad, 2006)

14. M. Luscher, *Lusher test color diagnostic* (protocol sheets), 85 (Luzern, 2008)

15. K. Dzh. Dzherdzhen, *Social constructionism: knowledge and practice: articles*, 232 (Translated by A. M. Korbuta, ed. A. A. Polonnikova, Minsk, BGU, 2003)