UDC 159.9.072.423+159.9.075

THE RELATIONSHIPS BETWEEN EXPERIMENTAL DATA DERIVED WITH PERSONALITY PROJECTIVE TEST «DYNAMICAL EMOTIONAL AND MOTIVATIONAL PATTERN» AND OTHER PERSONALITY TESTS

Pushkin O. A.

This article gives preliminary evaluation of validity and reliability of personality projective test "Dynamical Emotional And Motivational Pattern". Validity of this test defines comparing experimental data for frustration levels Dynamical Emotional And Motivational Pattern intaken for anxiety levels and self-appraisal levels taken with other personality tests, such Lüscher Colour Test and C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin). Reliability of Dynamical Emotional And Motivational Pattern test evaluates with the "test-retest" reliability are taken.

Key words emotions, motivation, anxiety, frustration, self-appraisal, personality test, projective test, validity, reliability.

В даній статті надається попередня оцінка валідності і надійності проективної психодіагностичної методики "Динамічний Емоційно-Мотиваційний Патерн". З метою визначення валідності надаються та аналізуються статистичні дані – коефіцієнти кореляції – досліджень рівнів тривожності, фрустрації потреб та самооцінки особистості досліджуваних осіб, отриманих за допомогою методик: Динамічний Емоційно-Мотиваційний Патерн, Восьмикольоровий тест Люшера, Методики діагностики самооцінки Ч. Спілбергера – Ю. Ханіна та "Особистісний Диференціал". Також надаються дані щодо тест-ретестової надійності методики Динамічний Емоційно-Мотиваційний Патерн.

Ключові слова емоції, мотивація, тривожність, рівень фрустрації, самооцінка, тест особистості, проективний тест, валідність, надійність.

В данной статье приводится предварительная оценка валидности и надёжности проективной психодиагностической методики "Динамический Эмоционально-Мотивационный Паттерн". С целью определения валидности представлены и проанализированы статистические данные – коэффициенты корреляции – между уровнями тревожности, фрустрации потребностей и самооценки личности испытуемых, полученных с помощью методик: Динамический Эмоционально-Мотивационный Паттерн, Восьмицветовой тест Люшера, Методики диагностики самооценки Ч. Спилбергера – Ю. Ханина и методики «Личностный Дифференциал». Также представлены данные по тест-ретестовой надёжности методики Динамический Эмоционально-Мотивационный Паттерн.

Ключевые слова эмоции, мотивация, тревожность, уровень фрустрации, самооценка, личностный тест, проективный тест, валидность, надёжность.

In 2012 the author designed and applied in a practical research for the first time the projective personality test named "Dynamical Emotional And Motivational Pattern", which was meant to be used as a brand new psycho-diagnostic instrument for examining certain features of emotional, volitional and motivational spheres of personality. The subjects to be examined with this test are the persons which suffer from different mental disorders, especially having speech disorders, preventing their feeling and state of being representation, along with the sane persons. [1].

Keeping in mind the aim to obtain preliminary evaluation of validity and reliability of personality projective test "Dynamical Emotional And Motivational Pattern", there was conducted the examination of 60 female subjects at age of 18 to 52 and 50 male subjects at age of 18 to 63, having at least full secondary education, mentally sane and residing in City of Kharkiv and Kharkiv region. The mentioned research took place in period of July – September 2012, and included the examination the subjects with "Dynamical Emotional And Motivational Pattern" test, Lüscher Colour Test (adopted by L. Sobchik) [2], C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin) and "Semantic Differential" test (adopted by E. Etkind)[3].

Defining of validity. The first approach to validity defining of "Dynamical Emotional And Motivational Pattern" test included ascertainment of the correlation relationships between the level of personal frustration (State and Trait) derived with "Dynamical Emotional And Motivational Pattern" test on the one hand, and the level of anxiety (State and Trait) derived from Lüscher Colour Test (adopted by L. Sobchik), C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin), and the level of personal self-appraisal derived from "Semantic Differential" test (adopted by E. Etkind) on the other hand (tab. 1, tab.2) [4].

Below presented statistical data describing the results of given research.

Table 1

The correlations between experimental data according to Spearman's rank-order correlation coefficient (ρ) and Pearson's correlation coefficient (r) , female subjects

	DEMP S	DEMP T	LUSH S	LUSH T	ANX S	ANX T	APP G	APP P	APP A
DEMP T	ρ=0,75** r=0,78**	DEMP T							
LUSH S	ρ=0,25 r=0,34**	ρ=0,09 r=0,18	LUSH S						
LUSH T	ρ=0,26* r=0,29*	ρ=0,12 r=0,14	ρ=0,73** r=0,73**	LUSH T					
ANX S	ρ=0,36** r=0,37*	ρ=0,37** r=0,32*	ρ=0,20 r=0,07	ρ=0,20 r=0,17	ANX S				
ANX T	ρ=0,15 r=0,06	ρ=0,13 r=0,09	ρ=0,10 r=-0,01	ρ=0,13 r=0,05	ρ=0,65** r=0,62**	ANX T			
APP G	ρ=-0,19 r=-0,29*	ρ=-0,05 r=-0,18	ρ=-0,16 r=-0,30*	ρ=-0,23 r=-0,33*	ρ=-0,19 r=-0,23	ρ=-0,13 r=-0,13	APP G		
APP P	ρ=0,10 r=0,17	ρ=0,11 r=0,17	ρ=0,29* r=0,40**	ρ=0,33** r=0,29*	ρ=-0,18 r=-0,14	P=-0,08 r=-0,13	ρ=0,04 r=-0,05	APP P	
APP A	ρ=-0,18 r=-0,23	ρ=-0,16 r=-0,16	ρ=0,12 r=0,01	ρ=-0,01 r=-0,15	ρ=-0,25 r=-0,18	ρ=-0,01 r=0,02	ρ=0,27** r=0,36**	ρ=0,44** r=0,37**	APP A

* p < 0.05 (two-tailed)
** p < 0.01 (two-tailed)

Table 2

The correlations between experimental data according to Spearman's rank-order correlation coefficient (ρ) and Pearson's correlation coefficient (r) , male subjects

	DEMP S	DEMP T	LUSH S	LUSH T	ANX S	ANX T	APP G	APP P	APP A
DEMP T	ρ=0,74** r=0,74**	DEMP T							
LUSH S	ρ=0,14 r=0,17	ρ=0,08 r=0,14	LUSH S						
LUSH T	ρ=0,09 r=0,20	ρ=0,11 r=0,21	ρ=0,75** r=0,77**	LUSH T					
ANX S	ρ=0,27 r=0,36**	ρ=0,27 r=0,37**	ρ=0,08 r=0,13	ρ=0,04 r=0,16	ANX S				
ANX T	ρ=0,21 r=0,31*	ρ=0,27 r=0,34*	ρ=-0,03 r=-0,01	ρ=0,07 r=0,13	ρ=0,74** r=0,76**	ANX T			
APP G	ρ=-0,15 r=-0,22	ρ=-0,40** r=-0,37**	ρ=-0,02 r=-0,10	ρ=-0,08 r=-0,13	ρ=-0,31* r=-0,37**	ρ=-0,46** r=-0,45**	APP G		
APP P	ρ=0,03 r=-0,03	ρ=-0,02 r=-0,11	ρ=-0,18 r=-0,12	ρ=-0,30* r=-0,19	ρ=-0,14 r=-0,18	ρ=-0,17 r=-0,29*	ρ=0,26 r=0,25	APP P	
APP A	ρ=-0,08 r=-0,12	ρ=-0,17 r=-0,18	ρ=-0,23 r=-0,36**	ρ=-0,21 r=-0,34*	ρ=-0,28* r=-0,33**	ρ=-0,07 r=-0,09	ρ=0,17 r=0,28*	ρ=0,28* r=0,33*	APP A

* p < 0.05 (two-tailed)
** p < 0.01 (two-tailed)

DEMP S — level of personal frustration as state (1-st probe), taken with "Dynamical Emotional And

Motivational Pattern" test;

DEMP T — level of personal frustration as trait (2-d probe), taken with "Dynamical Emotional And Motivational Pattern" test;

LUSH S — level of personal anxiety as state (1-st probe), taken with Lüscher Colour Test (adopted by L. Sobchik);

LUSH T — level of personal anxiety as trait (2-d probe), taken with Lüscher Colour Test (adopted by L. Sobchik);

ANX S — level of personal anxiety as state, taken with C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin);

ANX T — level of personal anxiety as trait, taken with C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin);

APP G — level of general personal self-appraisal, taken with "Semantic Differential" test (adopted by E. Etkind);

APP P — level of personal power self-appraisal, taken with "Semantic Differential" test (adopted by E. Etkind);

APP A — level of personal activity self-appraisal, taken with "Semantic Differential" test (adopted by E. Etkind).

It is significant to note a sufficient positive correlation between the levels of personal frustration (state and trait) taken with "Dynamical Emotional And Motivational Pattern" test and the levels of personal anxiety (state and trait) taken with C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin), for both female and male subjects. Similar comparison of the levels of personal anxiety taken with Lüscher Colour Test (adopted by L. Sobchik) turned out less rate for male subjects then female ones.

Also, it turned out a significant negative correlation between the levels of personal frustration taken with "Dynamical Emotional And Motivational Pattern" test and the levels of general personal self-appraisal, taken with "Semantic Differential" test (adopted by E. Etkind). Similar comparison to the levels of personal power self-appraisal and personal activity self-appraisal turned out to have less rate for both female and male subjects.

According to J. Cohen [5], in psycho-social studies the value of correlation coefficients may be considered: up to 0,10 as "small", about 0,30 as "medium", 0,50 and more as "large".

Defining of reliability. There was preliminarily defined reliability level of "Dynamical Emotional And Motivational Pattern" test with calculation of the "test-retest reliability" – comparing the number of stimuli choice coincidences at certain positions of the first and the second test probes. The number of mentioned coincidences in the first and the second test probes among female subjects is 47,71%, among male subjects is 56%. The mean number is 51,86%.

Also, in the same research, the number of stimuli choice coincidences were taken as the result of Lüscher Colour Test (adopted by L. Sobchik) turned out to be 46,67% for female subjects and 48% for male subjects. The mean number is 47,34%.

The differences between the values of state and trait frustration levels taken with "Dynamical Emotional And Motivational Pattern" test turned out to be 5% for female subjects and 12% for male subjects, the mean value is 8,5%.

Similar differences between the first and the second probes of anxiety levels taken with Lüscher Colour Test (adopted by L. Sobchik) turned out to be 11,46% for female subjects and 12,5% for male subjects, the mean value is 11,98%. The differences between the state and trait anxiety levels taken due to C. Spielberger State/Trait Anxiety Inventory (adopted by Y. Khanin) turned out to be 7,4% for female subjects and 4,3% for male subjects, the mean value is 5,85%.

Thus we may say that personality projective test "Dynamical Emotional And Motivational Pattern" shows sufficient value of validity and test-retest reliability along with high correlation between state and trait personality frustration levels[6].

Mentioned above statistical calculations were made with PSPPIRE 0.7.9. software on Ubuntu 12.04 OS.

Drawing a conclusion. The personality projective test "Dynamical Emotional And Motivational Pattern" is suitable for examination the features of emotional, volitional and motivational spheres of personality features. The results of conducted research demonstrate a significant correlation of the personality frustration levels derived with "Dynamical Emotional And Motivational Pattern" test with anxiety and self-appraisal levels of subjects derived with other famous personality tests [7].

Noteworthy that "Dynamical Emotional And Motivational Pattern" test is sensible enough psycho-diagnostic instrument in comparison to similar personality projective test such Lüscher Colour Test (adopted by L. Sobchik) for detecting frustration and anxiety of examined subject.

Certain variations in correlation coefficients of experimental data between female and male subjects may be explained by limited amount of experimental sample along with possible gender and social-psychological differences between women and men.[8].

Thus the personality projective test "Dynamical Emotional And Motivational Pattern" can be used as a stand-alone psycho-diagnostic instrument as well as in combination with other famous personality tests.

Література

1. Пушкін О.А. Проективна психодіагностична методика «Динамічний Емоційно-Мотиваційний Патерн» та перший досвід її застосування / О.А. Пушкін // Вісник Харківського Національного Університету імені В.Н. Каразіна Серія «Психологія» Випуск 55. – 2014. – №1110. – С. 52 – 55.

2. Собчик Л. Н. МЦВ — метод цветовых выборов. Модифицированный восьмицветовой тест Люшера. Практическое руководство. — СПб.: Издательство «Речь», 2001. — 112 с.

3. Райгородский Д.Я. Практическая психодиагностика. Методики и тесты. – Самара: БАХРАХ-М, 2000. – 672 с.

4. Дружинин В.Н. Экспериментальная психология. — СПб: Издательство «Питер», 2000. — 320 с.: ил. — (Серия «Учебник нового века»)

5. Cohen J. Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum, 1988. – 567 р.

6. Психологическая диагностика: Учебное пособие. / Под редакцией
М.К. Акимовой. — СПб.: Питер, 2005. — 304 с.: ил.

7. Furr R.M., Bacharach V.R. Psychometrics: An introduction. – Sage Publications, 2008. – 445 P.

8. Rao C.R., Sandhip S. (eds) Handbook of Statistics, Psychometrics.
New York: Elsevier, 2006.

Literatura

1. Pushkin O.A. Proektyvna psykhodiagnostychna metodyka "Dynamichnyi Emotsiino-Motyvatsiinyi Patern" ta pershyi dosvid yiyi zastosuvannya / O.A. Pushkin // Visnyk Kharkivs'kogo Natsional'nogo Universytetu imeni V.N. Karazina Seriya "Psykhologiya" Vypusk 55. – 2014. – №1110. – C. 52 — 55.

2. Sobchik L.N. MTSV – metod tsvetovykh vyborov. Modifitsirovannyi vos'mitsvetovoi test Lyushera. Prakticheskoye rukovodstvo. – SPb.: Izdatel'stvo "Rech", 2001. – 112 c.

3. Raigorodskii D.Y. Prakticheskaya psikhodiagnostika. Metodiki i testy. – Samara: BAKHRAKH-M, 2000. – 672 c.

4. Druzhinin V.N. Eksperimental'naya psikhologiya. – SPb.: Izdatel'stvo "Piter", 2000. – 320 c.: il. – (Seriya "Uchebnik novogo veka")

5. Cohen J. Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum, 1988. – 567 р.

6. Psikhologicheskaya diagnostika: Uchebnoye posobiye. / Pod redaktsiyei M.K. Akimovoi. – SPb.: Piter, 2005. – 304 c.: il.

7. Furr R.M., Bacharach V.R. Psychometrics: An introduction. – Sage Publications, 2008. – 445 P.

8. Rao C.R., Sandhip S. (eds) Handbook of Statistics, Psychometrics.New York: Elsevier, 2006.