Personality Patterns of Suicide Attempters: Gender Differences in Ukraine

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In the present study, an attempt has been made to investigate the complete 'pattern' of a suicide attempter (SA) within the set of Big Five traits. Two models were used: M1, which includes the five main dimensions of Big Five in the analysis; and M2, which includes facets of those dimensions which were identified as important in M1. The study consisted of a group of SA (men – 326, women – 299) and a group of healthy volunteers (HV) (men – 143, women – 190) with a similar age range. Discriminant analysis (DA) showed that the factors most significant in discriminating the personality pattern of a male SA are (in decreasing order): (E) Extraversion, (N) Neuroticism, (C) Conscientiousness and (O) Openness; and for a female SA these factors were (E) Extraversion, (C) Conscientiousness and (A) Agreeableness. In M2 for men, the largest contribution to pattern recognition is (N_3) Depression. Moreover, in M2 for men significant characteristics were (in descending order): (E_6) Positive Emotions, (O_1) Fantasy, (E_4) Activity, and also (N_2) Angry Hostility, (C_3) Dutifulness, (C_4) Achievement Striving, (C_2) Order and (O_6) Values; and for women: (E_4) Activity, (C_6) Deliberation, (C_2) Order, (A_6) Tender-Mindedness, (E_5) Excitement Seeking, (E_6) Positive Emotions, (C_4) Achievement Striving, (A_2) Straightforwardness, (C_5) Self-Discipline and (E_1) Warmth. Analysis of the obtained data demonstrates that suicide attempts amongst males, can largely be associated with personality variables reflecting negative emotions; while female suicide attempts are primarily associated with variables regarding activity and self-regulation.
Keywords: suicide, personality traits, Big Five, gender differences, discriminant analysis.

En este estudio, se ha intentado investigar el patrón completo de un suicida potencial (SP) dentro de los rasgos del modelo Big Five. Se usaron dos modelos: M1 que incluía las cinco dimensiones del modelo en el análisis; y M2, que incluía aspectos de aquéllas dimensiones consideradas relevantes en M1. El estudio estaba compuesto por un grupo de SP (326 hombres y 299 mujeres) y un grupo de voluntarios sanos (143 hombres y 190 mujeres) con un rango de edad similar. El análisis discriminante, mostró que los factores más significativos en la discriminación de los patrones de personalidad de un hombre (SP) eran (en orden decreciente): (E) Extraversión; (N) Neuroticismo; (C) Conciencia; y (O) franqueza; y para una mujer (SP): (E) Extraversión; (C) Conciencia; y (A) Agradabilidad. En M2 para hombres, la mayor contribución al patrón de reconocimiento fue (N_3) Depresión. Es más, en M2 para hombres las características significativas fueron (en orden descendiente): (E6) Emociones positivas; (O) Fantasía; (E_4) Actividad; y también (N_2) Enfado-hostilidad; (C_3) Obediencia; (C_4) Consecución de logro; (C_2) Orden; y (O_6) Valores; y para mujeres (E_4) Actividad; (C_6) Deliberación; (C_2) Orden; (A_6) Ingenuidad; (E_5) Búsqueda de sensaciones; E6) Emociones positivas; (C_4) Consecución de logro; (A_2) Franqueza; (C_5) Autodisciplina y (E_1) Calidez. El análisis de los datos obtenidos demuestra que el intento de suicidio entre hombres puede, perfectamente, asociarse con variables de personalidad que reflejan emociones negativas; mientras que las mujeres que intentan suicidarse suelen asociarse con variables referidas a la actividad y la auto-regulación.
Palabras clave: suicidio, rasgos de personalidad, Big Five, diferencias de género, análisis discriminante.

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Suicidal behavior is an important socio-psychological problem, but there is insufficient research regarding the contribution of certain personal characteristics to suicidal actions. Sigmund Freud (1917) in his theoretical constructions concerning suicide gave much importance to personality intra-psychic factors. Farber's (1968) psycho-cultural theory also considered intra-psychic suicidal prerequisites, for example, 'vulnerability'. Allport (1966) defined a personality trait as 'a general striving for action' conditioning the relatively constant peculiarities of our behavior. However the tendency towards self-harm and auto-aggression is traditionally categorised as a behavioral reaction (described with the widespread term 'suicidal behavior'), and definition of such a complex and heterogenic phenomenon as suicidality in personality terms remains problematic. A series of empirical studies indicates the presence of peculiarities in the cognitive sphere specific to persons with suicidal behaviors (Williams & Dritschel, 1988; Pollock & Williams, 1998); however the problem of a holistic description of a suicidal person's personality still remains insufficiently developed. Approaches proposed in recent years to understand personality traits of a suicidal person are related to cognitive (Linehan, 1993) or to psycho-dynamic (Sokolova & Sotnikova, 2006) traditions. In the factor-analytical approach, studies focus on certain patterns peculiar to the factoral structure of the personality in suicidal individuals. Thus, it is shown that variables in the 'five-factor' personality model (Big Five), in particular, Neuroticism, Extraversion and Openness are significant predictors of various suicidal manifestations, in particular, phenomena of hopelessness and suicidal ideation (Chioqueta & Stiles, 2005); differences across these variables are associated also with the degree of intention of self-harm in persons over 50 years of age (Useda et al., 2007).

The present research is an attempt to describe the dispositional organisation of the personality of a person who has attempted suicide. With this purpose we explored the possibility to identify and describe a general 'pattern' of a suicidal personality set by the five-factor (Big Five) personality model. The Big Five model provided the possibility to obtain a detailed and ontogenetically stable 'portrait' of a person, including specific combinations of different traits.

Method

Participants

From a sample of suicide attempters (SA)[1] a group was selected numbering 625 persons. The group consisted of patients from hospitals and clinics in Odessa and other Ukrainian towns aged from 18 to 35 years old. An exclusion criterion was the presence of an accompanying psychotic disorder or reduced intellectual functioning and invalid results of the NEO PIR questionnaire as identified using methodology provided by Psychological Assessment Resources Inc. The group consisted of 326 males (52.2%) and 299 females (47.8%). The average age of the males was 23 ± 5.10 years, and of females 24.42 ± 5.01. The data base contained information on persons having attempted suicide, assessed on the Medical Damage Scale as having a score of 2 or more (2 assumes the presence of slight, but clinically clear medical consequences). More detailed information regarding GISS project design and standards can be found in previous publication (Wasserman, Geijer, Rozanov, & Wasserman, 2005).

In the given sample suicidal subjects were distributed according to the degree of severity of the SA in the following manner: 02 – 150 persons, 03 – 224 persons, 04 – 162 persons, 05 – 65 persons, 06 – 20 persons, 07– 4 persons. The average severity of a suicide attempt was 3.33 ± 1.1. Of these, 316 had attempted suicide by poisoning, 48 by hanging, 8 by drowning, 5 by using a firearm, 1 by fire and smoke, 2 by fumes, 199 by self-harm with sharp objects, 3 with blunt instruments, 30 by falling from a height, 6 by falling under a moving object, 3 by causing an accident, and 4 by other means.

As a control group, healthy volunteers (HV) were used, selected randomly from different social groups from the population of various regions of Ukraine and consisting of 333 people aged from 18 to 35. Of these, 43.0% were males (143), and 57.0% were females (190). The average age of the group was 26.81 ± 6.08. An exclusion criterion in this group was a history of suicide attempts and mental disorders. The sex-age composition of the HV group corresponded to the composition of suicide attempters in the given population (Rozanov, Zakharov, Zhuzhulenko, & Krivda, 2009).

Procedure

The interviews were conducted 3-5 days after the attempt was made with consideration for the somatic and psychological condition of respondents, in hospital, at home or later during a psychological counselling session post-hospitalisation. HV were interviewed mostly at the working places.

Apparatus

The main tool in the study was a NEO-PR personality questionnaire (Costa & McCrae, 1992) with the included function of discarding invalid results. Differences between

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[1] Data obtained in the Swedish-Ukrainian GISS Project 'Genetic Study of Suicides and Suicide Attempts' headed by Prof. D. Wasserman (Sweden) and Prof. V. Rozanov (Ukraine) with the financial support of the Wallenberg Foundation.

Table 1
Results of Discriminatory Analysis in the Male Group

Percentage of correct identification in the test (cross-checking) group	Discriminating ability of the function		Functions in centroids of the groups	Discriminatory variables significant for the analysis and their values:			
	Wilk's λ	P		non-standardised coefficients of CF		standardised coefficients of CF	
Men. Model 1							
74.6% (73.1%)	0.781	< 0.001	Suicidal subjects − 0.350 Healthy volunteers 0.796	N E O C Constant −2.439	−0.036 0.037 0.023 0.032	N E O C	−0.414 0.437 0.253 0.344
Men. Model 2							
94.9% (94.0%)	0.353	< 0.001	Suicidal subjects − 0.934 Healthy volunteers 1.951	N2 N3 E4 E6 O1 O6 C2 C3 C4 Constant −4.042	−0.025 −0.046 0.026 0.035 0.028 0.015 0.019 0.023 0.024	N2 N3 E4 E6 O1 O6 C2 C3 C4	−0.248 −0.471 0.272 0.316 0.283 0.146 0.178 0.238 0.224

the groups were assessed using discriminant analysis (DA). Personality traits of SA and the HV according to five-factor model, served as a set of characteristics for discriminant analysis: Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), Conscientiousness (C), and a more differentiated set of data representing facets of each domain, in total, 30 sub-factors or facets (Costa & McCrae, 1992). The quality of the classification and its statistical significance was assessed (percentage of correct identification), permitting a judgement on the degree of 'pattern' identification for an attempted suicide within the five domains ('five-factor' model, hereinafter – M1) and in the set of facets of those factors which were identified as important in the previous model (hereinafter – M2) with subsequent analysis of the data obtained.

Results and Discussion

The classification results, including the two classes: 'suicide attempts' and 'healthy volunteers' for men and women respectively are presented in Tables 1 & 2. Within the tables, the following information is displayed: the percentage of viable classification for the tested and cross-checking groups; the Wilk's Lambda; the level of statistical significance (p); and the most significant variables determined by the program during the step DA to classify the overall group into 'suicide attempters' and 'healthy volunteers' in models M1 and M2. There are indicated values of the canonical function (CF) for group centroids (points with coordinates that are the average values of discriminatory variables for the given class, i.e., conditionally presenting the most 'typical' representative of the given class), permitting the interpretation of the growth trend in CF values regarding their role in the discrimination of classes. The list of variables that proved to be significant for the analysis is accompanied by an indication of the values of non-standardised and standardised coefficients (SC) of CF; the latter permitting conclusions to be drawn regarding the contribution of variables to the probability of a subject belonging to a certain classification. Also presented is the value of the constants within the CF equation.

The DA results (see Tables 1 and 2) demonstrate that the possibility of differentiating suicidal individuals in the control group into M1 is equal to 74.6% and 69.9% for men and women respectively, with a high degree of statistical probability ($p <$ .001). A slightly greater degree of probable identification is noted for men: 74.6% (73.1% in the cross-checked group) against 69.9% (69.7% in the cross-checked group) for women in the similar model. The values for this classification parameter in the cross-check group declined insignificantly. Thus, on the basis of the NEO-PR personality

Table 2
Results of Discriminatory Analysis in the Female Group

Percentage of correct identification in the test (cross-checking) group	Discriminating ability of the function		Functions in centroids of the groups	Discriminatory variables significant for the analysis and their values:			
	Wilk's λ	*P*		non-standardised coefficients of CF		standardised coefficients of CF	
Women Model 1							
69,9% (69.7%)	0.791	< 0.001	Suicidal subjects − 0.410 Healthy volunteers 0.643	E A C Constant	−0.054 0.025 0.052 −6.396	E A C	0.600 0.306 0.548
Women Model 2							
97.1% (95.6%)	0.333	< 0.001	Suicidal subjects − 1.179 Healthy volunteers 1.693	E1 E4 E5 E6 A2 A6 C2 C4 C5 C6 Constant	0.015 0.042 0.023 0.021 0.019 0.020 0.028 0.022 0.021 0.038 −12.072	E1 E4 E5 E6 A2 A6 C2 C4 C5 C6	0.163 0.412 0.238 0.221 0.193 0.240 0.251 0.196 0.189 0.356

questionnaire approximately 3 people out of 4 are correctly identified as a suicidal personality or as a healthy volunteer. This result demonstrates a strong correlation between suicidal tendencies and individual personality traits.

In the DA it was possible to identify a number of the most significant discriminatory variables (DV, see Tables 1 and 2).

Model 1

In M1 for men such variables were E, N, C and O, and for women E, C, and A. For the centroid of the 'suicide attempt' class in the male group, as illustrated in Table 1, the CF value was negative (- 0.350) which means that there is an inverse relationship between an increase in the CF value and the probability of a subject from the male group belonging to the 'suicide attempt' class. In accordance with this, it is possible to interpret the SC value for CF in this group. The SC for the variable N has a negative value (- 0.414) and correspondingly its contribution to the level of probability of a subject belonging to the 'suicide attempt' class is positive, i.e., the higher the level of Neuroticism, the more likely a subject is to belong to this class. The SC values for the variables E, C and O are positive (0.437, 0.344 and 0.253 respectively) which indicates an inverse dependence of the

probability of belonging to the 'suicide attempt' class on these variables, i.e., the higher the value of the given variables, the less likely the subject is to belong to this class. The greatest SC value is the factor E, which shows that this factor is the most significant in determining the 'suicide attempt' class, and its positive value indicates the importance of *a lack* of extraversion, i.e., of a person's interests being directed towards his social environment, or an interest in socialising, according to the NEO-PR authors (Costa & McCrae, 1992) *(hereinafter the significant value of the factors and facets correspond to the proposed and assumed interpretations of the NEO-PR authors)* for the probability of a subject belonging to the 'suicide attempt' class. The factors C and O make a similar contribution to the probability of belonging to the 'suicide attempt' class: the lower the value of the variables C and O, the greater the *lack* of Conscientiousness and Openness, the higher this probability. The value of the factor N is opposite to the values of the factors E, C and O, as the SC value is negative (- 0.414). Thus, the 'pattern' for a male suicide attempt can be determined as *deficit-excessive* or *deficit-cumulative*, associated in the first instance with a *lack* or *deficit* of extraversion, to a lesser degree – with an *excess* of neuroticism. A deficit in the factors C (Conscientiousness) and O (Openness) is less important in comparison with the values for the factors E and N. The dimension E is understood

first and foremost as sociableness (Costa & McCrae, 1992), and also associated with a feeling of happiness and satisfaction with life (Hayes & Joseph, 2003), and C as a factor associated with control of impulses and self-regulation, also defined as *character* (Costa & McCrae, 1992). Suicidal ideation in healthy students is positively predicted by the factor N, and negatively by the factor C (Chioqueta & Stiles, 2005; Velting, 1999). Moreover, a high level for the factor N and a low level for the factor C are predictors of stress vulnerability; namely, such combinations of intensity in these traits moderate the influence of the factor E on the degree of this vulnerability (Vollrath & Torgersen, 2000). On the whole though, the measurement of 'extraversion-introversion' is viewed as an indicator of how a person achieves a feeling of happiness (Hills & Argyle, 2001). Thus, consideration of the multidirectional combination of negative emotions (factor N) and personality traits associated both with self-regulation (factor C) and with social interaction variables (factor E) determining stress vulnerability, permits the prediction of suicidal tendencies for men in three cases out of four.

Analysis of CF values for centroids in the female group reveals a tendency similar to that in the male group: a positive pole for a function's values is related with the 'healthy volunteer' class (0.643), and a negative one – with the 'suicide attempt' class (- 0.410). Correspondingly positive SC values of the remaining variables C (0.548), E (0.600) and A (0.306) testify that a statistically significant identification of a 'pattern' for a suicide attempt is inversely associated with an increase in the values for the given variables, i.e., the 'pattern' for female suicide attempts is first of all associated with a *deficit* of Extraversion and Conscientiousness, and to a lesser degree – with a *deficit* in Agreeableness. Therefore, the 'pattern' for a female suicide attempter is a deficiency within a complex combination of inter-related variables (C, E and A). First position by significance in the prediction of belonging to the 'suicide attempt' class in women, like for men, is occupied by dimension E (social interaction). The second is contribution of the dimension C (Conscientiousness). These personality characteristics are associated with a tenacity in achieving socially important goals; a self-determination and to a certain extent strong self-regulation. An impaired ability for self-regulation is categorised by some authors as a characteristic personality trait in people with so-called 'borderline personality organisation', a phenomenon the incidence of which, according to some estimates, reaches 72% in the female suicide attempters population (Linehan, 1993). The obtained result confirms the significance of a deficit in internal organisation and self-regulation resulting in a tendency towards suicide, in females.

The domain A (Agreeableness) is associated with interpersonal interactions, with social collaboration and being a "people-person", and in this sense this factor is close to factor E, while combination of A and C from evolutionistic point of view is considered important for the survival of the group (Pervin & John, 2001). Extremely low scores for A are associated with pathologically expressed narcissistic and paranoid personality traits (Costa & McCrae, 1990). Within the five-factor personality model, Eysenck's psychoticism is understood as a combination of very low levels of traits A and C (Pervin & John, 2001). Also high levels of psychoticism positively predict 'avoidance' coping (Kardum & Krapic, 2001). A subjective positive attitude to suicide also directly correlates with the level of psychoticism (Knight, Furnham, & Lester, 2000).

Thus, one of the extreme points on the conditional 'axis' along which differentiation occurs between female suicide attempters and healthy volunteers is the combination of low values in factors E, C and A (i.e., probably high values on the psychoticism scale), relating to personality deviations with expressed social disadaptation, a decrease in self-regulation, a tendency towards 'avoidance' coping, and an inability to manage problems.

Certain authors combine the factor N, more precisely – inverse Neuroticism, and the factors A and C in a 'Stability' metatrait associated with the serotonin system (DeYoung, Hasher, Djikic, Criger, & Peterson, 2007), and the factors E and O in a 'Plasticity' metatrait (Musek, 2007). The data obtained permits the assumption that in groups of men and women different aspects of the 'Stability' and 'Plasticity' metatraits are activated in suicidal behavior and for both men and women the greatest contribution in the discriminating ability of CF is provided by the same variable: Extraversion. It is also interesting that in the obtained models the factor O ('Openness') is only significant for men, and then only to a minimal degree. The aspect of the 'Plasticity' metatrait, expressed by the factor O, seems to have little significance in the probability of suicidal behavior in men and still less in women. It is too early for us to state that for men as a whole the 'Plasticity' metatrait is more important (as there were both variables E and O in the analysis) in the formation of suicide tendencies than for women, although it does not lack certain evidence. The absence of factor A in the number of discriminating factors in the male group may indicate the insignificance of the ability to express anger and other negative emotions in differentiating the 'suicide attempt' class, which is not possible to say of the female group, as the factor A is present in the list of discriminating variables. A reverse situation is noted with factor N: the absence of Neuroticism in the list of significant variables in the model for the female group may point to the significance of differences in expressing anger and other negative feelings, but not in the presence itself (or level of expression) of such feelings.

Model M2

A model considering the facet structure of the NEO-PR, in the present study was used to identify the most important facets for differentiating a pattern for suicidal

tendencies on the basis of significant Big Five domains identified in M1. Thus, in the male group the analysis considered facets of factors E, N, C and O (in total 24 facets), and in the female group facets of factors C, E and A (18 facets). Models both in the male and female groups showed a very high percentage of probable identification in the test group and in the cross-checking group (for men, respectively, 94.9% and 94.0%, and for women 97.1% and 95.6%). We have hypothesized that obtained lists of facets that correspond with domains from M1 permits the discrimination of SA men and women from corresponding HV with the highest resolution. SC of this model for both gender subgroups are presented in Tables 1 and 2.

As is seen from Table 1, the most significant subfactor for men was N3 ('Depression', SC = − 0.471), which increases the probability of an individual belonging to the 'suicide attempt' class. The SC value for the variable E6 ('Positive Emotions') is less than the SC for N3 and has a positive value (0.316), indicating an inverse dependence between the size of these variables and the probability of a subject belonging to the 'suicide attempt' class. The subfactor E6 has the largest predictive value in relation to a feeling of happiness and wellbeing (Costa & McCrae, 1992). Thus, according to the given model, two traits are mostly peculiar to the 'suicide attempt' class: a high value of the 'Depression' facet (tendency to suffer feelings of guilt, sadness, hopelessness and loneliness) and low values for the 'Positive Emotions' facet (decreased tendency to have feelings such as joy, happiness, love and excitement). Thus both traits indicate the importance of personality predispositions to depression in the formation of suicidal behavior in men.

The third most important facet in the given model is O1 ('Fantasy', SC = 0.283), and low values for this facet are associated with belonging to the 'suicide attempt' class and describe a tendency to be prosaic and stubborn in their opinions when solving practical tasks. Together with low values of another facet for Openness domain - O6 ('Values', SC = 0.146) which point to a tendency to be dogmatic and conservative, such traits may indicate a certain type of rigidity of personality in a suicidal subject, which is confirmed by the above-mentioned assumption on the contribution of the 'Plasticity' metafactor in the development of suicidal tendencies in men.

The values for facet N2 ('Angry Hostility', SC = - 0.248) are directly associated with the probability of belonging to the 'suicide attempt' class. This facet describes individual willingness to express anger and having feelings of bitterness and frustration. Low values for facets E4 ('Activity', SC = 0.272), C3 ('Dutifulness', SC = 0.238, a facet to a greater degree expressing the essence of factor C, C4 ('Achievement Striving', SC = 0.224, and C2 ('Order', SC = 0.178) add to the 'portrait' of a suicidal male subject having such traits as slowness and enervation of action, unreliability and negligence in the fulfilment of accepted obligations, a lack

of ambition and aspiration to achieve socially significant goals, low confidence and lack of method.

Thus, the given model for identifying a 'suicide pattern' includes a critically important excess of emotions in the depression spectrum: guilt, hopelessness and loneliness (facet N3) in combination with a deficit of subfactor E6, i.e., a feeling of happiness and wellbeing, and possibly, a certain rigidity (facets O1 and O6), proneness to anger (facet N2), a low level of activity (facet E4) and insufficient motivation (facet C4), and unreliability in relation to moral and ethical issues (facet C3). By its substantial 'load', M2 may be viewed as practically identical to M1 for men. It is known that not only Extraversion, but also Neuroticism (more precisely its low level) are associated with feelings of happiness and wellbeing (Hayes & Joseph, 2003; Furnham & Brewin, 1990). Models M1 and M2 may reflect a constellation of traits peculiar to the 'core' of the male suicide group: low level of happiness and wellbeing (associated with a lack of positive emotions and low emotional stability) in combination with insufficient motivation to achieve life goals and insufficient development of personal morality and ethics.

DA in M2 for women gives a different picture. The greatest contribution to the probability of a correct 'pattern identification' for female suicide attempters is facet E4 ('Activity', SC = 0.412) (see Table 2). The list of significant variables illustrates that such women are less active and slower (facet E4 'Activity') unable to get organized and unmethodical (facet C2, 'Order'), less compassionate and more thrifty in relations with other people, possibly less empathetic (facet A6, 'Tender-Mindedness'), do not seek new experiences (facet E5, 'Excitement-Seeking'), rarely experience positive emotions (facet E6, 'Positive Emotions'), and are characterized by insincerity with a tendency to manipulate others (facet A2, 'Straightforwardness'), low warmth and cordiality in relationships, with a formality and aloofness (facet E1, 'Warmth'). A positive value for all SC in this list of variables indicates that lack of these traits predicts probability of belonging to the 'suicide attempt' class (see Table 2), moreover facet E4 was mostly associated with this probability.

The obtained model describes the structure of a 'core' subgroup in the female suicide group. On the whole, such people are characterised by stylistic peculiarities in their everyday activity (sluggishness, lack of self-organization, unmethodical activity, lack of interest in new experiences) and in intrapersonal relationships (cold and calculating in relationships, insincerity and manipulativeness, formality and aloofness), and also a lack of a feeling of happiness, with poor well-being and a lack of positive emotions. The most significant were the variables reflecting style of activity (E4 'Activity' and C2 'Order'). Worthy of attention is the fact that in the female group in model M2, the facet E6 'Positive Emotions' reflecting a possible predisposition to depression has relatively less 'weight' if compared with the

similar model for the male group. As seen from Table 1, in model M2 for men the most important contribution to the possibility of differentiating suicidal subjects and HV is made by facet N3, 'Depression', which we do not discover in the female group. Probably, in the female population differences in negative emotionality in suicidal subjects (Neuroticism absence in the list of significant factors in model M1 for women) and depression in particular (facet N3 lacking in the list of significant factors in model M2) are not so important as in the male population (see Table 1). This fact may be interesting also from the point of view of a 'gender paradox' in the study of suicide: a higher frequency of diagnosed depression in women, but a higher frequency of committed suicides in men (Gunnell, Rasul, Stansfeld, Hart, & Davey Smith, 2002). The obtained models permit the assumption that for the female population personality dispositions in relation to depression have a slightly different relationship to suicidal tendencies than for the male population, for which, as follows from the obtained models, both 'depression' itself as a personality trait and neuroticism are more distinctly associated with suicidal tendencies. To what degree and how precisely such gender differences in the structure of the personality are associated with a gender specific development of depression remains unclear and requires further research. It is possible that 'male' depression (associated with suicidal behavior) has a personality predisposition that is different to that of the female population.

Applicability of the proposed models is limited by the segments of accurate classification (see Tables 1 and 2), approximately a third of cases in M1 are clearly carriers of certain other regularities in the combination of personality traits. On the other hand M2 provides much better classification with only 5% in males and 3% in females falling out. Obtained data reflects not only gender differences in suicidal tendencies, but also a link to one of the central phenomena of suicidal behavior – a suicide attempt – with personality characteristics recorded by the factor-analytical model.

We consider that this data confirms that a certain combination of personality traits may be important in predicting the likelihood to attempt suicide in specific life circumstances and these combinations may be different in males and females. We must not forget however, that the models described are retrospective by nature. Nevertheless they help better understanding of the phenomenon of self-destructive behavior and may be useful for the development of more differentiated approaches in suicide prevention.

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