Personality profiles and risk behaviours in students from universities in Timis county, Romania

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Abstract: In the performed study we investigated the personality profiles in students from universities in Timis County, and students with risk behaviours (tobacco smoke, alcohol and drug consumption, suicidal and aggressive behaviours and risk sexual behaviour). The method consisted on two epidemiological enquiries, a cross-sectional survey (Freiburg Personality Inventory – FPI 212 – for personality profile establishing) and another retrospective (CORT – 2004 – for risk behaviours investigation), applied together, individual and anonymous on a sample of 2124 students from universities in Timis County. Obtained result indicated a profile with high ranks (rank 7) of the scales FP1 Nervousness and FP9 Sincerity for entire sample, the same profile for smokers, low ranks (rank 3 and 2) of the scale FP8 Inhibition for alcohol and drugs consumers respectively, average ranks (4-6) of all the scales for students with suicidal behaviour, low rank (rank 3) of the scale FPE Extroversion for students physical aggressive, high ranks (rank 7) of the scale FP5 Sociability for students verbal aggressive and with risk sexual behaviours. The students with risk behaviours excepting suicidal have high ranks (7) of the scales FP1 Nervousness and FP9 Sincerity. In conclusion, Freiburg Personality Inventory can be used successfully to assess personality
profile for a group of people at a specific period of life (developmental stage).

**Keywords:** personality profile, developmental stage, risk behaviours, late school period

**Introduction**

Theories of personality have different angles of approach [1]. Each approach (main trends are: psycho-dynamic, cognitive-behavioural and humanistic) has made important contributions [1, 2]. In present, there is the tendency to have an integrative view of personality, using appropriate methods of diagnosis and therapy of the client [3]. Each person is unique in terms of how he/she perceives itself and relate to others [2]. As a result, personality profiles are done individually. Investigating a big group of people (students) and highlighting features that appear most frequently offer us the opportunity to see which personality traits predominate at this stage of development. It is a profile of the developmental stage of the investigated subjects, which related to risk factors at this age’s group, allows us to determine which personality traits increase the risk exposure and which are not.

**Material and methods**

The study was conducted on a sample of 2124 students (1074 girls, 638 boys, aged 19-25 years) of all the faculties from Timis County, statistical representative, to whom were investigated the following risk behaviours: cigarette smoking, alcohol and drug consumption, suicidal and hetero-aggressive behaviour and risk sexual behaviour. The methods consisted of the application of two epidemiological surveys: cross epidemiological enquiry with Freiburg Personality Inventory application for personality profile and retrospective epidemiological enquiry with CORT Questionnaire application to investigate risk behaviours in students. Both questionnaires were applied together, being administered individually and respecting anonymity. Duration of two questionnaires applying was 60 minutes. Freiburg Personality Inventory is a questionnaire that allows the investigation of the personality traits evolution between two opposite poles, more in terms of behaviour. The four areas of the personality (cognitive, affective, behavioural and physiological) are included in these scales, although not in explicitly. FPI contains 212 items grouped into 9 scales at which in order to obtain a more complete
The 12 scales of the FPI-G (212 items) are: FPI 1 (nervousness) - 34 items, 1 item is Polar--; FPI 2 (agression) - 26 items, 2 items Polar--; FPI 3 (depression) - 8 items, 1 Polar--; FPI 4 (excitability) - 20 items, 1 Polar--; FPI 5 (sociability) - 28 items, of which 16 Polar--; FPI 6 (calm) - 20 items, 1 Polar--; FPI 7 (domination) contains 20 items, 1 Polar--; FPI 8 (inhibition) - 20 items, 5 Polar--; FPI 9 (sincerity) contains 14 items, all positive; FPI E (extroversion) contains 24 items, 5 Polar--; FPI N (emotional lability) contains 24 items, 3 Polar--; FPI M (masculinity) contains 26 items, of which 14 are Polar-. Polar "-" represents 1 point of listing the answer "No" response and 0 points "Yes". Polar "+" is 1 point of listing the answer "Yes" and 0 points to the answer "No" [4, 5].

CORT 2004 questionnaire included 127 items in order to investigate risk behaviours (cigarette smoking, alcohol and drug consumption, suicidal and aggressive behaviour, risk sexual behaviour) and family environment. Processing and interpretation of FPI - G was performed using SPSS 13.0 and Excel 2003. Due to the risk of errors of interpretation by processing FPI - G in Excel 2003, masculinity scale was not processed in our study using interpretation to 11 stairs (FPI - FPN).

**Results and discussions**

3.1 Distribution of students (%) from Timis County ordered by rank

Table 1. Distribution (%) by ordering students according to rank (quantitative hierarchy) along the dimension of the personality traits

<table>
<thead>
<tr>
<th>Rank</th>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FPI1. Nervousness</td>
<td>6,5</td>
<td>3,5</td>
<td>14,8</td>
<td>10,4</td>
<td>15</td>
<td>18,4</td>
<td>21,4</td>
<td>7,9</td>
<td>2,1</td>
</tr>
<tr>
<td>2</td>
<td>FPI2. Aggression</td>
<td>5,3</td>
<td>3,6</td>
<td>8,9</td>
<td>20,6</td>
<td>19,8</td>
<td>16,9</td>
<td>11,2</td>
<td>7,8</td>
<td>5,9</td>
</tr>
<tr>
<td>3</td>
<td>FPI3. Depression</td>
<td>4,2</td>
<td>10,8</td>
<td>14,3</td>
<td>15,3</td>
<td>18,1</td>
<td>17,4</td>
<td>9,1</td>
<td>7,7</td>
<td>3,2</td>
</tr>
<tr>
<td>4</td>
<td>FPI4. Excitability</td>
<td>7,4</td>
<td>5,2</td>
<td>12,7</td>
<td>14,7</td>
<td>23</td>
<td>13,3</td>
<td>15,3</td>
<td>4,3</td>
<td>4,2</td>
</tr>
<tr>
<td>5</td>
<td>FPI5. Sociability</td>
<td>2,6</td>
<td>4,6</td>
<td>7</td>
<td>14,6</td>
<td>18,2</td>
<td>17,6</td>
<td>17,2</td>
<td>13,2</td>
<td>5,2</td>
</tr>
<tr>
<td>6</td>
<td>FPI6. Calm</td>
<td>7,4</td>
<td>5,2</td>
<td>7,6</td>
<td>16,3</td>
<td>22,5</td>
<td>19,2</td>
<td>9,8</td>
<td>8,1</td>
<td>3,8</td>
</tr>
<tr>
<td>7</td>
<td>FPI7. Domination</td>
<td>5,7</td>
<td>8,7</td>
<td>6,8</td>
<td>20,7</td>
<td>19,7</td>
<td>17,9</td>
<td>11,5</td>
<td>6,1</td>
<td>2,9</td>
</tr>
<tr>
<td>8</td>
<td>FPI8. Inhibition</td>
<td>13,6</td>
<td>11,5</td>
<td>14,5</td>
<td>15,5</td>
<td>16,3</td>
<td>14,7</td>
<td>9,6</td>
<td>2,6</td>
<td>1,8</td>
</tr>
<tr>
<td>9</td>
<td>FPI9. Sincerity</td>
<td>4,3</td>
<td>5,9</td>
<td>16,8</td>
<td>10,8</td>
<td>17,6</td>
<td>18</td>
<td>19</td>
<td>5,6</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>FPE. Extraversion</td>
<td>5,4</td>
<td>3,9</td>
<td>27</td>
<td>36,3</td>
<td>9,2</td>
<td>12,8</td>
<td>2,5</td>
<td>1,4</td>
<td>1,4</td>
</tr>
<tr>
<td>11</td>
<td>FPN, Emotional lability</td>
<td>10,9</td>
<td>8,8</td>
<td>10,5</td>
<td>19,9</td>
<td>16,2</td>
<td>16,9</td>
<td>11,2</td>
<td>4,1</td>
<td>1,5</td>
</tr>
</tbody>
</table>
The 9 + 2 steps of the Freiburg Personality Inventory are the result of structuring derived by factorial analysis. Name of scale is simply a label.

A percentage of 21.4\% (377) of students were fit in the 7th rank of the **FP1 Nervousness** scale, with the presence of vegetative symptoms, motor and general psychosomatic disorders, and increased somatic-emotional resonance. 20.6\% (362) of students are in the 4th rank of the **FP2 Aggression** scale that indicates the framing in the average limitations of this scale. A percentage of 18.1\% (318) of the investigated students are located in 5th rank of the **FP3 Depression** scale. There are significant percents of the low ranks recorded for depression, 2nd rank (10.8\% - 190 students) and 3rd rank (14.3\% - 251 students). This result suggests the balanced, predominant positive and relaxed, optimistic disposition, few worries, good emotional relationships with others, good ability of concentration, confidence, complacency, lack of doubts and worries; students feel able to handle life and are happy with their fate. 23\% (404) students of the investigated sample have included at the 5th rank (area of balance) of the scale **FP4 Excitability**. This scale correlates usually with scale FP1 Nervousness and FP2 Aggression. In our study, correlation excitability-nervousness is medium/low (rho - Spearman = 0.458, P = 0.01) and excitability-depression is average (rho - Spearman = 0.602, P = 0.01). 18.2\% (320) of the investigated students had the rank 5 in the **FP5 Sociability** scale, a result that suggests the average regarding the rates. A percentage of 22.5\% (396) of the investigated students were situated at the 5th rank of the scale **FP6 Calm**. A percentage of 20.7\% (364) of students were situated at the 4th rank of the **FP7 Domination** scale, suggesting the lowest rank of the average area of the scale, the balance area. High rates of the FP7 Domination scale are usually associated with high rates of the FP4 Excitability scale. This statement is not confirmed in our study, lower rates are recorded and Spearman correlation FP7 - FP4 is average (rho = 0.563, p = 0.01) 16.3\% (287) of the investigated students are situated at the 5th rank of the scale **FP8 Inhibitions**. It is considered a good association of this scale with FP3 Depression scale. This is confirmed in our study by the existence of an average Spearman correlation (rho = 0.625, p = 0.01) between FP8 Inhibition Scale and FP3 Depression Scale 19\% (334) of students are situated at 7th rank of the **FP9 Sincerity** scale. This classification highlights the predominance of the ability to recognize small weaknesses and defects that probably everyone has, self-criticism, eventually indifferent attitude. It is noted, the presence of a high percentage of students at 3rd rank of the FP9
scale, respectively 16.8% (296) youth, which indicates frequently lack of sincerity, concealment of weakness or defects and closed character. A percentage of 36.3% (639) of the investigated students are situated at 4th rank of the **FPE Extroversion** scale, at the lower limit of the balance area. A large proportion of students (27% - 75) were registered at 3rd rank of the FPE. This result indicates lack of sociability, isolation, restraint, perseverance, mastery, passivity, lack of communication, avoiding entertainment, and desire to be left alone. 19.9% (350) of the investigated students are situated at 4th rank of the **FPN Emotional lability** scale, at the lower limit of the balance area. A large proportion of students (10.9% - 192) were situated at 1st rank, with very low emotional lability, with balanced, stable disposition, positive feelings, good humour, self confidence, ability to concentrate, undisturbed emotional relationships with others (Table 1).

### 3.2 Personality profile of the investigated students in Timis County

Personality traits recorded in our study to the investigated students can be presented in a personality profile, built for the entire study sample and highlighting the ranks that have the highest frequency in each scale. Highest percentage values to a specific rank presented compliance trends with the Gauss distribution, with few exceptions (FP2 Aggressiveness and FP7 Domination scales). This profile shows predominance of the features specific to the stage of development. For a comparison of our study results on the personality profile of students in Timis County with standard values, we will indicate the significant levels (more than 6 or less than 4) of these bipolar personality dimensions in each scale of the profile (Figure 1 A).
Personality profile of the students in Timis County was characterised by representative percents of the high ranks of bipolar personality dimensions for the following scales: FP1 Nervousness (rank 7) and FP9 Sincerity (rank 7) with body’s vegetative symptoms, general psychosomatic disorders and an increased somatic-affective resonance (FP1), ability to recognise small weaknesses and failures, self-criticism and indifference (FP9).

3.3 Personality profiles of the students with risk behaviours

The personality profile of the students which smoke has been characterised by high values for FP1 Nervousness and FP9 Sincerity scales with the highest percentages to 7th rank (Figure 1B).

In students which consume alcohol we observed a profile with high rank (7) for FP1 Nervousness and FP9 Sincerity scales and low (rank 3) for FP8 Inhibition scale (Figure 2A). Added features revealed by this profile through FP8 Inhibition scale are: spontaneity, confidence, independence, persistence in decision and action, ability to establish contact, reduced somatic tension in expecting situations, reduced somatic-affective symptoms, eager for action, ready every time to start the action, to experiment, entrepreneur. The personality profile of the students registered as drug users (Figure 2B) is similar to that of
alcohol consumers: high values for FP1 Nervousness scale and FP9 Sincerity (rank 7) and very low value for FP8 Inhibitions scale (rank 2).

The personality profile of the students with *suicidal behaviour* (Figure 3A) does not have strong personality features, the values of the scales being in the average (ranks 4-6), and this area being considered a balanced one, due to features bipolarity. Students with *physical aggressive behaviour* (Figure 3B) show low values for FP9 Sincerity and FPE Extroversion (Rank 3). Obvious personality traits that emerge from this profile and characterise students with physical aggression are: subject inclined to conceal some weaknesses and defects, would make a good impression, lack of sincerity, poor self-criticism, pride and possibly dark character (FP9), lack of sociability, prefer to be single, hard bound friends, isolated, reduced need for contacts, calm and restraint, less enterprising, steadfast, steady, sober, passive, dry, do not like entertainment, reticent, reluctant to stand out, prefer to be left alone (FPE).

![Grafic rezultatelor](image1.png)

![Grafic rezultatelor](image2.png)

Figure 2. The personality profile of the students which consume alcohol (A) and drugs (B), compared with standard
Figure 3. The personality profile of the students which have had suicidal behaviours (3A) and physical aggressive behaviours (3B), compared with standard.
Figure 4. The personality profile of the students which have had verbal aggressive behaviours (A) and risk sexual behaviour (B), compared with standard

To students with verbal aggressive behaviour (Figure 4A) recorded elevated rank (7) for scales FP1, FP5 and FP9. Results obtained in this profile add to the features of the entire sample of students the following traits: need and tendency of contacts establishing, seeking contact, be friendly, fast link to friends and to more known persons, alertness, entrepreneurial, active, talkative, communicative, presence of mind (FP5). The personality profile of the students which started their sexual life and have risk sexual behaviours (Figure 4B) is similar with the profile of the students which are verbal aggressive, in terms of high ranks (7) for scales FP1, FP5 and FP9. Results show a balanced personality profile to investigated students with the nervousness poignancy and self-critical spirit. Gaussian curves of the investigated sample confirms profile with very few exceptions, aggression and domination, which are still in the balance. Risk behaviours seen in investigated students are relevant to students with low inhibition (alcohol and drugs), increased sociability (verbal aggression, risk sexual behaviour), and introversion (physical aggression). Self-aggression (suicidal behaviour) is present in students with a profile similar to standard, and smoking is present in students with the profile of the entire sample. These results are significant for a great group of young people, offer information regarding personality features in students with affirmed risk behaviours and characterise a specific age group 19-25 years and a developmental stage - late school
period. In literature, investigations of personality features, general or specific to developmental stages of human life, were frequently conducted, using different approaches [6, 7].

Conclusions

Investigated students have similar personality profiles as the standard, with poignancy of the nervousness, self-criticism.

The profiles of the students with risk behaviours are similar with the sample (smokers), with low inhibition (alcohol and drug consumers), similar with standard (suicides), introverted and with low sincerity (physical aggressors) and high sociability (verbal aggressors and with risk sexual behaviour).

Freiburg Personality Inventory can be used successfully to assess personality profile for a group of people at a specific period of life (developmental stage).

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