THE STUDENTS’ GENDER-CHARACTEROLOGICAL PECULIARITIES AND THEIR IMPACT ON THE PANDEMIC COVID-19 EXPERIENCE

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Abstract
The aim of the study is to determine the peculiarities of the character traits level and to identify their impact on the pandemic COVID-19 experience in students’ female and male subsamples. Methods: Leonhard-Shmishek’s characterological questionnaire, “The pandemic COVID-19 experience” questionnaire (Martsynkovskaya & Tkachenko), methods of mathematical statistics. The results show that the students’ character traits manifest themselves in different structures of the girls’ and boys’ “group portraits”. Six of ten studied character traits (hypertymia, emotiveness, exaltation, pedantry, anxiety, demonstrativeness) have statistically meaningful differences in their levels in boys and girls. The traits of emotiveness, exaltation, and pedantry construct the triad with emotional orientation, which dominates among girls. The traits of hypertymia, cyclothymia, and excitation make the triad with a deedful orientation and dominate among boys. It has been set that the pandemic COVID-19 experience is influenced both by gender-independent character traits (pedantry and anxiety) and gender-dependent ones (rigidity in girls; emotiveness, exaltation, dysthymia, hyperactivity in boys). Calculated meaningful correlations show that girls’ rigidity, pedantry, anxiety, and boys’ emotiveness, pedantry, dysthymia, and exaltation enforce their pandemic COVID-19 experience. Among revealed meaningful correlations is one negative, which indicates that boys’ hyperactivity reduces their pandemic COVID-19 experience. The boys’ character traits have a stronger influence on the pandemic COVID-19 experience (five significant correlations) than girls’ character traits (three significant correlations). It is revealed that girls’ accentuated character traits both occur three times more often and moreover paradoxically weaker influence girls’ COVID-19 pandemic experience than boys’ middle-level traits. Regarding the obtained data on the stronger influence of character traits on the boys’ experience of the COVID-19 pandemic, it is obvious that appropriate psycho correction and psychotherapy with young men require longer and more persistent work, associated with the difficulties of influencing such stable personality’s qualities as character traits.

Keywords: gender, character trait, accentuation, pandemic COVID-19, experience, student.
Introduction

The COVID-19 pandemic has become a new side of our being, which caused people’s need to realize it, develop a certain attitude towards this phenomenon, and build their behaviour in extreme situations that threaten their health and even life. The emotional component, without a doubt, is one of the main factors both in the formation of a constructive attitude to the COVID-19 pandemic and in the determination of an individual’s health-saving behaviour reactions. That is why the problem of psychological factors of a person’s experience of the COVID-19 pandemic is one of the most relevant areas of modern psychological studies.

The set of studies (Maksymenko et al., 2020: 89) outlines the psychological dimensions of human activity and communication in the terms of an epidemic situation experience, shows practical directions for psychological support in overcoming the person’s health negative impact of such inner states and feelings such as fear, anxiety, panic, helplessness, despair, irritation, apathy, etc. Moreover, it has been established the effectiveness of the individual’s emotional support which is aimed at enhancing the experience of such life-affirming feelings as optimism, security, and confidence.

Another empirical study (Yevdokimova & Okhrimenko, 2020: 61) confirmed the hypothesis that the peculiarities of overcoming stress caused by quarantine isolation are largely determined by a person’s attitude to forced restrictions, in particular, the orientation of the individual to accept this situation and actively transform the experience from negative to positive emotional modality.

The study of the post-COVID mental disorders spectrum (Emelyanceva et al., 2021: 383) revealed in patients aged 51±4.21 years widespread of an anxiety disorder, distress, and sleep disturbance. The symptoms of depressive disorder and generalized anxiety disorder were notably less spread. Significant strong connections were found between the patients’ depressive symptoms severity and the depth of distress, between symptoms of anxiety and depression. Cognitive disorders particularly the executive functions’ deficit had clear correlations with depressive symptoms and the level of distress. The gender differences in the indicators of the mental disorders in the studied patients were not revealed.

An extensive strain was reported due to healthcare workers’ stress experience as well as depression and anxiety symptoms (Bohlken et al., 2020: 191). Severe degrees of those symptoms were found in 2.2% to 14.5% of all participants. And this fact indicates the need for their psychological and psychotherapeutic support. The peculiarities of named emotional disorders were determined by healthcare workers’ age, gender, occupation, specialization, type of activities performed, and proximity to COVID-19 patients.

Manifestations of the person’s social maladaptation such as chaotic behaviour, misunderstanding of its motivation, and disability to take into account one’s own experience under quarantine restrictions were found in 15% of respondents aged 25-45 (Homych & Vojtenko, 2021: 114). Situational (reactive) anxiety occurs in 50% of the respondents, for whom this state leads to the destruction of the personal values and ideas, that seemed to be fairly stable. The interrelation of the respondents’ optimistic and pessimistic attitudes with the level of negative emotional states experience has been revealed. The survey shows that about 16% of adults aged 21 to 50 marked a negative emotional state, constant depressive thoughts, and a fairly high level of existential loneliness and anxiety experience. The majority of respondents with a negative attitude towards quarantine had a particularly high level of personal anxiety. The state of anxiety provokes frustration experiences and depressive thoughts and reduces the life satisfaction level. Characteristic emotional states are also loneliness, alienation, helplessness, irritability, fatigue, and a feeling of constant danger.

It was conducted the theoretical analysis of quarantine conditions on the over realizing the stable gender stereotypes of marital relations (Kostina, 2020). Particularly, it underlined two gender
variants of the crisis experience scheme in the quarantine situation connected with the prevention of the COVID-19 pandemic. It was noted that the male’s variant of the scheme causes the strong pressure on the men’s emotional sphere which leads to the auto aggression or aggression aimed at the family members.

However, in spite of fairly active studying of the issues of the COVID-19 pandemic experience, there is a lack of works on the problems of gender characteristics of the psychological factors of the COVID-19 pandemic experience. In this regard, we undertook a study aimed to determine the character traits’ peculiarities and to identify their impact on the COVID-19 pandemic experience in students’ female and male subsamples.

The purpose of the article is to reveal the peculiarities of the COVID-19 pandemic experience depending on the character traits of he- and she-students. The objectives of the article are 1) theoretical analysis of the conducted studies on the named issue; 2) the empirical discovery of the gender differences of characterological traits and their influence on the COVID-19 pandemic experience among university students. The study was performed in the autumn of 2021 while one of the COVID-19 waves in Ukraine.

Research methods

The empirical study was conducted using Leonhard-Schmishek’s (Moskaliova & Moskaliov, 2014: 140) characterological questionnaire and the “COVID-19 pandemic experience” questionnaire (Martsinkovskaya & Tkachenko, 2021) were used. Leonhard-Schmishek’s questionnaire consists of 88 issues, each of which requires a yes or no answer. With its help, the level (accentuation) of ten-character traits was determined. These are hyperthymia, rigidity, emotiveness, pedantry, anxiety, cyclothymia, demonstrativeness, dysthymia, exaltation, and excitation. Hyperthymia is a trait of increased activity, energy, and cheer. Rigidity reflects a tendency to prolonged mental concentration on events or situations, and a reduced ability to switch from one experience to another. Emotiveness is defined as emotional instability, lability, and quick and abrupt disposition swings. Pedantry characterizes a detailed and purposeful personality with inert nervous processes, who master new conditions and any changes with difficulty. Anxiety means a typical self-doubt state, the expectation of something unpleasant, or terrible. Cyclothymia is defined as an alternation, a cyclic change of increased (hyperthymia) and depressed (dysthymia) moods. Demonstrativeness means the desire of the individual to be in the center of attention. Dysthymia is a feature of pessimism, hypochondria, and passivity. Exaltation is manifested as enthusiasm, dreaminess, romanticism, and emotional excitement. Excitation reflects impulsivity, high reactivity, and decreased self-control.

The results of the respondents on Leonhard Shmishek’s questionnaire scales in the range from 0 to 12 points, we considered as a low level of diagnosed character traits, in the range from 13 to 18 points – as an average level, and results from 19 to 24 points – as a high level (accentuation).

The questionnaire “COVID-19 pandemic experience” consists of 21 issues, the answer to each of which is offered to choose from the following options: yes (2 points), don’t know / not sure – (1 point), no (0 points). The assessment of the COVID-19 pandemic experience varies from 0 to 42 points and is determined based on the sum of points scored by the respondent on eight scales: “Space frustration”, “Degree of danger”, “Methods of protection”, “Information”, “Future and digital technologies”, “Emotional state”, “Time frustration”, “Future and reality”.

In the aim to calculate the empirical results of the study, methods of mathematical statistics were used (determination of percentages, typical results of the variation series, variance, standard deviation, Fisher’s angular transformation criterion ϕ *, Student’s criterion, Spearman’s rank correlation coefficient).
The study involved students of the educational degree “Master” (future teachers of Ukrainian, a foreign language, mathematics, physical education, fine arts, political scientists, psychologists, sports trainers, hotel and restaurant business specialists, archaeologists) in the amount of 139 persons (51 boys and 88 girls). The age of respondents varies in the range of 21-24 years, the average age is 22.5 years.

**Results and discussions**

Calculation and analysis of empirical data on each of ten Leonhard-Shmishek’s questionnaire scales made it possible to determine average meanings (m – arithmetic mean, sd – standard deviation) of the character traits level in the female and male subsamples (Table 1).

<table>
<thead>
<tr>
<th>Character traits</th>
<th>Abbreviation</th>
<th>Total sample (n=139)</th>
<th>Girls (n=88)</th>
<th>Boys (n=51)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>m</td>
<td>sd</td>
<td>m</td>
<td>sd</td>
</tr>
<tr>
<td>Hyperthymia</td>
<td>H</td>
<td>14.3</td>
<td>6.9</td>
<td>14.1</td>
</tr>
<tr>
<td>Rigidity</td>
<td>R</td>
<td>13.0</td>
<td>4.1</td>
<td>13.5</td>
</tr>
<tr>
<td>Emotiveness</td>
<td>EM</td>
<td>13.0</td>
<td>5.4</td>
<td>15.5</td>
</tr>
<tr>
<td>Pedantry</td>
<td>P</td>
<td>13.3</td>
<td>4.6</td>
<td>14.6</td>
</tr>
<tr>
<td>Anxiety</td>
<td>A</td>
<td>10.0</td>
<td>6.4</td>
<td>12.8</td>
</tr>
<tr>
<td>Cyclothymia</td>
<td>C</td>
<td>13.5</td>
<td>5.1</td>
<td>13.5</td>
</tr>
<tr>
<td>Demonstrativeness</td>
<td>DM</td>
<td>13.4</td>
<td>4.9</td>
<td>14.0</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>DS</td>
<td>9.3</td>
<td>4.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Exaltation</td>
<td>EL</td>
<td>13.6</td>
<td>6.2</td>
<td>15.1</td>
</tr>
<tr>
<td>Excitation</td>
<td>EC</td>
<td>13.6</td>
<td>5.1</td>
<td>14.0</td>
</tr>
</tbody>
</table>

The Table 1 analysis shows that the average meanings for the traits of emotiveness and anxiety are noticeably higher in girls (15.5 and 12.8 points, accordingly) than in boys (8.6 and 5.3, accordingly). Female students also have somewhat higher scores for rigidity, pedantry, demonstrativeness, exaltation, and excitability. However, dysthymia is relatively less presented in girls (8.3 points) than in boys (10.9 points). Hyperthymia and cyclothymia have almost the same level (with a difference of tenths of a point) both in boys and in girls.

Let us describe the “group portraits” of the students’ female and male subsamples, constructed by determining the character traits rank hierarchy in their average meanings descending order (Table 2).

<table>
<thead>
<tr>
<th>Subsamples</th>
<th>The place of character trait in the descending sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
</tr>
<tr>
<td>Girls (n=88)</td>
<td>4</td>
</tr>
<tr>
<td>Boys (n=51)</td>
<td>1</td>
</tr>
</tbody>
</table>
In girls, the hierarchy of character traits is reflected in the following descending order: emotiveness, exaltation, pedantry, hyperthymia, demonstrativeness, rigidity and cyclothymia, anxiety, dysthymia. A notable different sequence of character traits was found in young men, namely: hyperthymia, cyclothymia, excitability, demonstrativeness, rigidity, pedantry and exaltation, dysthymia, emotiveness, anxiety. The difference in places of the traits in the female and male “group portraits” varies from a minimum of 1 rank (anxiety) to a maximum of 7 ranks (emotiveness). There is no statistically significant correlation between girls’ and boys’ character traits ranks (r=0.05), which indicates a different structure of their “group portraits”.

The distribution of character traits levels in students’ female and male subsamples is shown in Table 3rd. Particularly, we were interested in the percentage of students with a high character traits level, since this level indicates a certain character disharmony i. e. accentuation. The obtained data indicate that the most common accentuation in both boys and girls is hyperthymia, while girls have no accentuation of dysthymia, and boys have no accentuation of emotiveness, exaltation, and anxiety.

Table 3

<table>
<thead>
<tr>
<th>Questionnaire’s scales</th>
<th>Total sample (n=139)</th>
<th>Girls (n=88)</th>
<th>Boys (n=51)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High level (accentuation)</td>
<td>Average level</td>
<td>Low level</td>
</tr>
<tr>
<td>1. Hyperthymia</td>
<td>29.5</td>
<td>33.1</td>
<td>37.4</td>
</tr>
<tr>
<td>2. Rigidity</td>
<td>6.5</td>
<td>43.2</td>
<td>50.3</td>
</tr>
<tr>
<td>3. Emotiveness</td>
<td>10.1</td>
<td>38.8</td>
<td>51.1</td>
</tr>
<tr>
<td>4. Pedantry</td>
<td>11.5</td>
<td>37.4</td>
<td>51.1</td>
</tr>
<tr>
<td>5. Anxiety</td>
<td>11.5</td>
<td>23</td>
<td>65.5</td>
</tr>
<tr>
<td>6. Cyclothymia</td>
<td>12.9</td>
<td>41</td>
<td>46.1</td>
</tr>
<tr>
<td>7. Demonstrativeness</td>
<td>15.8</td>
<td>38.8</td>
<td>45.4</td>
</tr>
<tr>
<td>8. Dysthymia</td>
<td>2.1</td>
<td>14.4</td>
<td>83.5</td>
</tr>
<tr>
<td>9. Exaltation</td>
<td>13.7</td>
<td>25.2</td>
<td>61.1</td>
</tr>
<tr>
<td>10. Excitation</td>
<td>17.3</td>
<td>27.3</td>
<td>55.4</td>
</tr>
<tr>
<td>Average</td>
<td>13.1</td>
<td>32.2</td>
<td>54.7</td>
</tr>
</tbody>
</table>

The hyperthymia (29.5%), pedantry (18.2%), anxiety (18.2%), demonstrativeness (18.2%), exaltation (18.2%) are most accentuated traits among girls. Meanwhile, hyperthymia (17%) and excitability (13.6%) are most accentuated among boys. Both boys and girls have different content of the descending sequence of accentuated character traits (Table 4). The absence of statistically significant correlations between girls’ and boys’ accentuated character traits descending sequence (r=0.09) confirms the gender peculiarity of a female and male characters.
The accentuated character traits descending sequence in students’ female and male subsamples

<table>
<thead>
<tr>
<th>Subsamples</th>
<th>Character traits ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
</tr>
<tr>
<td>Girls (n=88)</td>
<td>1</td>
</tr>
<tr>
<td>Boys (n=51)</td>
<td>1</td>
</tr>
</tbody>
</table>

The Fisher’s angular transformation criterion φ* made it possible to determine statistically significant gender differences (for p ≤ 0.01) in the levels of six character traits accentuations, namely: hyperthymia (φ*=2.9), emotiveness (φ*=5.8), exaltation (φ*=4.2), pedantry (φ*=5.9), anxiety (φ*=5.8), demonstrativeness (φ*=3.4).

We also note that a high level of character traits (accentuation) is found in the students’ female subsample almost three times more often (15.2%) than in the male subsample (5.5%).

The revealed gender differences in the character traits levels allowed us to assume that their impact on the pandemic COVID-19 experience also has female and male variants.

The next step was to determine the gender characteristics of the students’ pandemic COVID-19 experience. The quantitative results obtained as a result of using the questionnaire “The pandemic COVID-19 experience” were presented by two variational series – for the female and male subsamples. Then we determine such variation series characteristics as arithmetic mean (m), mode (Mo), median (Me), variance (Var), and standard deviation (sd) (Table 5).

The analysis of the Table 5 shows that the boys’ and girls’ variation series have the same average meanings (m=19.4). The responses of both girls and boys are normally distributed. The rest of the characteristics are different. The boys’ variation series is bimodal. Boys have lower meanings regarding mode (Mo=19 & 20 versus 21 in girls), median (Me=19 versus 21 in girls), variance (Var=11.9, versus 47.1 in girls) and standard deviation (sd=3.4, versus 6.9 in girls). However, the Student’s criterion (t=0.4) indicates that the gender differences in the variational series characteristics are statistically insignificant (p≤0.01).

Let us note that the most appreciable gender differences in the variational series relate to the dispersion, which is much lower in boys than in girls. This result indicates that the young men’s subsample is mostly characterized by average meanings of the COVID-19 pandemic experience, while among girls, “extreme” options are typical – with very acute or noticeably weakened experience. Thus, the female subsample has higher contrast COVID-19 pandemic experience.

To determine the pandemic COVID-19 experience gender characteristics depending on character traits, we calculated the Spearman rank correlation coefficients between the data of each of the Leonhard-Shmishek questionnaire’s scales and the data on the COVID-19 pandemic experience in the female and male subsamples (Table 6).
The correlations between Leongard-Shmishek questionnaire’s scales and the pandemic COVID-19 experience

<table>
<thead>
<tr>
<th>Subsamples</th>
<th>Character traits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
</tr>
<tr>
<td>Female</td>
<td>-0.02</td>
</tr>
<tr>
<td>Male</td>
<td>-0.42**</td>
</tr>
</tbody>
</table>

Significance value: **p≤0.01; *p≤0.05.

Table data 6 show that for the female subsample, the pandemic COVID-19 experience statistically significantly (p≤0.01) positively correlates with such character traits as rigidity (r=0.38), pedantry (r=0.52), anxiety (r=0.43). For the male subsample, statistically significant (p≤0.01) positive correlations of the pandemic COVID-19 experience with traits of emotiveness (r=0.54), pedantry (r=0.39), and exaltation (r=0.39) were determined; as well as with anxiety (r=0.36) and dysthymia (r=0.38) with the significance of p≤0.05.

The only character trait with which the pandemic COVID-19 experience correlates negatively is hyperthymia (r=−0.42) in the male subsample with a significance of p≤0.01.

The obtained correlation coefficients suggest that gender-independent character traits that affect the pandemic COVID-19 experience are pedantry and anxiety. The higher their degree, the more acutely the events associated with the COVID-19 pandemic are experienced by both girls and boys. A possible explanation for this dependence may be the well-known pedantic and anxious individuals' tendency to fear uncertainty, the unknown, and any changes that they perceive as a kind of threat to a stable state of affairs.

Let us analyze the gender-dependent correlations. Only in girls, rigidity is a factor in the pandemic COVID-19 experience.

Evidently, rigid girls tend to extremely durable life situations experiencing, are unable to switch themselves to current events, which feeds their excessive focus on such an emotionally strong and long-lasting irritant as the pandemic COVID-19 is.

The emotiveness, exaltation, and dysthymia determine the young men's tendency to deeper pandemic COVID-19 experience. At the same time, the young men’s hyperactivity makes them emotionally more resilient to the pandemic COVID-19 perception, allows them to treat it without extremely acute feelings, and contributes to the negative emotions displacement by saturating their lives with various interesting content.

Regarding the total sample, it should be noted that out of ten diagnosed character traits, only three (cyclothymia, demonstrativeness, and excitability) do not affect the pandemic COVID-19 experience. He-students are more dependent on the pandemic COVID-19 experience on their character traits (five significant correlations) than she-students (three significant correlations). In this regard, it can be argued that a greater dependence of the emotions experience on character (as the most stable personality traits) indicates relatively lower plasticity in the male subsample. It is more difficult for young men to emotionally adapt to situational changes than for girls, whose experiences are less dependent on persistent character traits, therefore they are capable of more flexible responses to current events. In favor of our assumption that the pandemic COVID-19 experience intensifies in the individuals with the inability to respond flexibly to current events, is the direct dependence of this experience in girls on the trait of rigidity with its typical manifestations of low plasticity and getting stuck on emotionally charged situations.
Taking into account the data obtained on the stronger character traits influence on the pandemic COVID-19 experience in the male subsample, it is obvious that conducting appropriate psycho correction and psychotherapy with young men requires longer and more persistent work, associated with the difficulties of influencing the individual’s stable character traits.

Considering the three times more often accentuations’ prevalence among girls, we also note that a high level of character traits affects the pandemic COVID-19 experience paradoxically less noticeably than character traits of medium level, which are more typical for boys.

Conclusions

The obtained results allow us to assert that students have gender-characterological peculiarities, which consist of different sequences of the character traits in order of their descending level, as well as their accentuations sequences, as a greater prevalence of accentuations among girls than among boys. As the conducted study shows the students’ gender-characterological peculiarities are manifested in the different “group portraits” structures in girls and in boys. In the totality of character traits of female students, the triad “emotiveness, exaltation, pedantry” dominates, which, in our opinion, indicates an emotional orientation of their character. In young men, such a triad is “hyperthymia, cyclothymia, excitability”, which indicates a deedful orientation of their character.

A statistically significant gender-independent positive correlations were identified between the pandemic COVID-19 experience and such character traits as pedantry and anxiety. At the same time, some statistically significant gender-dependent correlations were revealed. Thus, young men’s exaltation, emotiveness, and dysthymia intensify, and hyperthymia reduces the pandemic COVID-19 experience. The trait of rigidity intensifies the pandemic COVID-19 experience only in girls. The idea has been expressed that pandemic COVID-19 experience psycho correction and psychotherapy in he-students are more difficult than in she-students.

The further study will be aimed to elaborate on the proper gender-oriented psycho correction of the post-COVID-19 emotional disorders in students.

Literature


References


ГЕНДЕРНО-ХАРАКТЕРОЛОГІЧНІ ОСОБЛИВОСТІ СТУДЕНТІВ ТА ЇХ ВПЛИВ НА ПЕРЕЖИВАННЯ ПАНДЕМІЇ COVID-19

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Анотація

Ключові слова: стать, риса характеру, акцентуація, пандемія COVID-19, переживання, студент.