Studying the Phenomenon of Early Burnout of Pedagogical University Students

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Abstract

It is now widely recognized that the problem of burnout is relevant not only in the context of occupational destruction of working people, but also in professional education. When conducting the research the authors of the article found out that 18% of students who are studying within traditional educational programs aimed at in-depth study of the theoretical aspects of education and 33% of students enrolled in educational programs with a strengthened practical orientation undergo the process of burnout. The most formed phase of burnout for both groups of students is the phase of resistance, which indicates the particular level of resistance to stress and the formation of protective mechanisms. As a characteristic feature of burnout, the authors note the predominance of the same symptoms in the phases of stress (anxiety and depression) and resistance (inadequate selective emotional response). The authors suggest that the phenomenon of student burnout can be regarded as a consequence of the negative impact of educational stress and the role conflict of various roles that the students perform within their practical training (the role of a teacher, assuming the implementation of professional and practical activities, and the role of a student, including the fulfillment of studies). As possible prerequisites determining student burnout, the authors consider the nature of the professional training activity, as well as the individual characteristics of the student personality (motivational sphere, anxiety, stress resistance), reinforcing the response to a stressful situation (educational one or role conflict). The results of the study support this assumption. There were stated the significantly higher values of reactive and personal anxiety, low stress-resistance (high stress load) and low motivation of achievements among "burnt out" students compared to students without any symptoms of burnout revealed. Therefore, earlier detection, prevention and correction of burnout is an actual problem while providing the professional training of future teachers at the stage of professional training of future teachers for the creation of preconditions for the formation of resiliently.

Annotation

It is now widely recognized that the problem of burnout is relevant not only in the context of occupational destruction of working people, but also in professional education. When conducting the research the authors of the article found out that 18% of students who are studying within traditional educational programs aimed at in-depth study of the theoretical aspects of education and 33% of students enrolled in educational programs with a strengthened practical orientation undergo the process of burnout. The most formed phase of burnout for both groups of students is the phase of resistance, which indicates the particular level of resistance to stress and the formation of protective mechanisms. As a characteristic feature of burnout, the authors note the predominance of the same symptoms in the phases of stress (anxiety and depression) and resistance (inadequate selective emotional response). The authors suggest that the phenomenon of student burnout can be regarded as a consequence of the negative impact of educational stress and the role conflict of various roles that the students perform within their practical training (the role of a teacher, assuming the implementation of professional and practical activities, and the role of a student, including the fulfillment of studies). As possible prerequisites determining student burnout, the authors consider the nature of the professional training activity, as well as the individual characteristics of the student personality (motivational sphere, anxiety, stress resistance), reinforcing the response to a stressful situation (educational one or role conflict). The results of the study support this assumption. There were stated the significantly higher values of reactive and personal anxiety, low stress-resistance (high stress load) and low motivation of achievements among "burnt out" students compared to students without any symptoms of burnout revealed. Therefore, earlier detection, prevention and correction of burnout is an actual problem while providing the professional training of future teachers at the stage of professional training of future teachers for the creation of preconditions for the formation of resiliently.

Keywords: Burnout; Students; Role conflict; Anxiety; Stress resistance; Motivation; Resilience

Introduction

The phenomenon of burnout was described by Freudenberger [1]. It was considered as a mental state of healthy working people, arising in an emotionally stressed atmosphere with intensive and close communication with clients and patients. Later it also began to be revealed among persons who were still receiving their professional education [2-4]. According to the studies conducted in different countries [5-8], Belozerova (2015), practically 40% of students studying in secondary and higher professional educational institutions have the symptoms of burnout of varying degrees of severity, while the quantity of burnout students increases from the first year of
education till the last one, which indicates the progressive nature of this phenomenon.

Appearing at the early stages of professional development of an individual, burnout can cause the negative state of health of students and their low academic performance, as well as low efficiency of work in future [7,9-12] and their early professional deformation. The study of the mechanisms of occurrence and peculiarities of the process of burnout will make it possible to influence it in a certain way.

The main researches, aimed at studying the phenomenon of burnout, describe the essence of this phenomenon, its structure and factors that contribute to its emergence. According to the studies of Maslach [13] the burnout syndrome is a state of physical and emotional exhaustion of a person, the structure of which includes emotional exhaustion, depersonalization and reduction of professional achievements [14]. Considers burnout as a mechanism of psychological protection of an individual in the form of partial or complete exclusion of emotions on the traumatic effects associated with professional activities. In very this case, burnout is a functional stereotype that allows one to dose and economize energy and psychological resources. According to the studies of Perlman & Hartman [15], Vodopyanova & Starchenkova [16], burnout is a separate aspect of professional stress and it should be considered as a model of responses to chronic work stressors leading to disruption of adaptation mechanisms and the development of burnout itself. In this regard, burnout is a form of body protection that occurs when the adaptive capacity of a person to overcome a stressful situation is exceeded [17-19]. Note that burnout is an aspect of professional deformation, the determinant of which is emotionally burdened and stressful relationships in the professional sphere. Thus, burnout can be considered as a manifestation of a professional deformation of an individual, or maybe as a mechanism for protecting it from further deformation and experienced stress. In any case, the determination of both, in our opinion, is the subjective experience of professional relations and achievements in meaningful activities.

The very understanding of the phenomenon of burnout is inextricably linked with the factors that cause it: personal (individual characteristics of a person); role (role conflict, role uncertainty and role congestion) and organizational features of professional activity [15].

Different researches describe the phenomenon of burnout either as a state involving several stable components of Maslach [13], or as a progressive process with stages replacing each other [14,20]. Any stage of burnout can be described using the same symptoms, having a different degree of severity and forming an individual symptomatic complex. In our opinion, using the characteristics of the symptomatic complexes of students, it is possible to determine the characteristic features of the phenomenon of early burnout.

The correlation of models describing the burnout and the factors that cause it suggests that burnout is formed as a reaction of the body to long-term stresses associated primarily with the characteristics of work, the conditions of professional activity, the social environment, the individual and personal characteristics of a person, manifested in the form of subjective experiences and achievements in meaningful activities of a person, which either perform a protective function, or act as internal prerequisites for its development.

While considering students as objects of professional activity, occupying the stage of its development, it is necessary to consider the additional conditions that can lead them to high psycho emotional stress, and, subsequently, to burnout. The following conditions include:

1. Lack of time for mastering large amounts of educational and scientific information, fulfilling study assignments;
2. Discrepancy between the learning assignment within the learning process, and the state of health and functional resources of students;
3. Lack of specialized training in overcoming stress in professional activity caused by psycho emotional tension, increased moral responsibility for the lives of individuals, intensity of interpersonal interactions;
4. Dissatisfaction with the choice of the specialty, the recognition of the wrong choice of the profession and lack of correspondence between the capabilities of a future specialist and professional requirements [8,21-23], Belozerova (2015).

As a result, even at the early stages of professional development students can either form confidence and readiness for independent activities in their chosen profession, or be disappointed with their future specialty, be uncertain about the correctness of their choice, and as a result, may appear the reduction of educational and professional motivation [24].

In the study of Simanyuk [24,25] it is noted that the motives for choosing a profession can be the prerequisites of professional destructions. It is worth noting that an increased motivation for work and the sense of responsibility can both compensate and help to overcome adverse working conditions (of a monotonous, uninteresting, satiated working process) and contribute to burnout if the individual is not able to realize his personal potential in the chosen activity [16]. Thus, the phenomenon of burnout can have some distinctive features, determined by the nature of the activity (professional and educational), as well as the peculiarities of educational and professional motivation.

In recent years, modern research deals with relevant study of such factor as resilience in the context of overcoming the adverse effects of burnout. Resiliently can be defined as the ability of a person or social system to build a normal full life under difficult conditions [26]. The concept of resiliently includes two ideas: destruction resistance (a person's ability to protect its integrity when it is under pressure) and the ability to build a full life under difficult conditions. This creative position suggests the ability to plan their lives, which implies movement in a certain direction.
for some time. In this sense, the concept of resiliency is wider in contrast to the concept of overcoming a difficult situation as it implies not only a single action to overcome obstacles but the process of moving to a new stage in life through difficulties. In this regard, the study of the burnout syndrome in the early stages of professional training is of great importance to create prerequisites for the formation of resiliency students.

**Design**

The study was conducted in 2014-2016 and consisted of three parts, distributed over time and involving different series of undergraduate students:

1. Determining burnout involved students of 4th and 5th years of education (two series of undergraduate student groups in 2015-2016)
2. Studying personality characteristics and motives of educational and professional activities (two series of undergraduate student groups in 2015-2017)
3. Studying the level of stress among students of 4th and 5th years of education (one group in 2015-2016)

**Participants**

The study involved undergraduate students of pedagogical university, who completed their pedagogical practice. The total number of students involved was 133 people: the first group included the students enrolled in traditional educational programs aimed at in-depth study of the theoretical aspects of education (100 students in 2015-2016), the second group included students enrolled in educational programs with enhanced practical orientation with an in-depth study of the theoretical aspects of education (100 students in 2015-2016).

**Measurements**

As a method of studying the burnout syndrome, there was used the questionnaire “Emotional Burnout” by VV Boyko [14] which consists of 84 statements [27] and allows to diagnose the formation of burnout phases (stress, resistance and exhaustion) analyzing the provided symptoms and scoring the points for each of them. The total sum of points indicates the formation of one or another burnout phase, and the sum of all the indices of all the symptoms indicates the degree of burnout syndrome formation: unformed, forming and formed. The validity of this questionnaire for students is confirmed in the studies performed by Alekseeva [28], Fishman & Goltssova [29], Kolokova & Kokurova [30], Matyushkina [23], Ivanova [31].

The motives of the educational activity of the pedagogical university students were studied with the help of the questionnaire “Educational motivation of Pedagogical university students” by SA Pakulina & Ovchinnikov MV [32] This technique makes it possible to distinguish the external and internal educational motivation within three groups of motives: the motives for entering the university, existing ones and professional motives. It also makes it possible to determine their dominance and the level of development of educational motivation. Determination of the motivation for success and fear of failures among students was carried out using the questionnaire of A.A. Rean “Motivation for success and fear of failure” [33].

To study the personal and reactive anxiety of students there was used the self-assessment methodology of [27]. Determination of the degree of stress and stress resistance of students was carried out using the methodology for determining the stress-resistance and social adaptation of Holmes & Rage [27].

To assess the reliability of the differences between the groups studied, we used the Mann-Whitney criterion. Determination of the links between the final indicator of “burnout” and the student’s personal characteristics was carried out according to Spearman correlation coefficient.

**Results**

The study of the extent of burnout syndrome in the first group showed that 18% of respondents have a formed burnout, 48% of respondents have a forming burnout, 34% of respondents have no burnout. The study of the extent of burnout syndrome in the second group showed that 33% of respondents have a formed burnout, 39% of respondents have a forming burnout, 28% of respondents have no burnout. Thus, there is an increase in the proportion of students with the signs of burnout and its emerging symptoms and a decrease in the number of students without the signs of burnout, it is also evidenced with the results of comparing the two series of students within the total level of burnout. According to the results of the survey, all students can be divided into students with formed burnout, students with forming burnout and students without any signs of burnout (without burnout). It is possible to define the main symptoms of each phase of burnout in all groups.

**Table 1:** Indicators of symptoms and phases of burnout within the students surveyed.

<table>
<thead>
<tr>
<th>Symptoms and phases of burnout</th>
<th>Without burnout</th>
<th>With forming burnout</th>
<th>With formed burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group 1</td>
<td>Group 2</td>
<td>Group 1</td>
</tr>
<tr>
<td>Symptom of experiencing psycho-traumatic circumstances</td>
<td>3.97±2.63</td>
<td>4.55±4.82</td>
<td>10.11±4.24</td>
</tr>
<tr>
<td>Symptom of self-dissatisfaction</td>
<td>3.88±2.72</td>
<td>0.67±1.32*</td>
<td>4.81±2.83</td>
</tr>
<tr>
<td>Symptom of “a tight corner”</td>
<td>0.67±0.77</td>
<td>3.11±3.1</td>
<td>5.94±3.41</td>
</tr>
<tr>
<td>Symptom of anxiety and depression</td>
<td>8.64±3.83</td>
<td>10.78±7.95</td>
<td>14.72±4.02</td>
</tr>
<tr>
<td>Phase of stress</td>
<td>17.18±6.07</td>
<td>19.11±10.43</td>
<td>35.58±7.72</td>
</tr>
</tbody>
</table>
A comparative analysis of the results of the study of both groups for the phases of the burnout syndrome indicates the prevalence of the same symptoms in the phases of stress and resistance, with varying degrees of its severity during these phases and various symptoms during the phase of exhaustion (Table 1).

The stress phase is the “triggering” mechanism in the formation of burnout, arising because of psycho traumatic circumstances [14]. In all the studied groups of students within the “stress” phase the symptom of “anxiety and depression” is the most distinct, which reflects an alarming tension and indicates that students are experiencing personal anxiety, disappointment in themselves and the chosen profession.

In the second phase of burnout, the individual strives to reduce the tension, to achieve psychological comfort by “saving” emotions [14]. The dominant symptom in the phase of resistance for both groups is “inadequate selective emotional response,” which represents an inadequate “economy” of emotions, limiting emotional returns through the selective reaction to situations. Such emotional reactions can be regarded as a desire for a temporary denial for solving problems.

The third phase of burnout is “exhaustion”. It is characterized by the fact that burnout becomes an integral attribute of an individual, causing a drop in the overall energy tone [14]. During this phase, the leading symptoms possessed by students without burnout and having it are different. The leading symptom during the phase of “exhaustion” in group of students without burnout and with forming burnout syndrome is the “emotional deficit”, which manifests itself in the fact that individuals experience mostly negative emotions, become irritable, touchy, harsh, and rude. The same symptom is the main one for burnout students in the second group. The leading symptom during the phase of “exhaustion” possessed by the students of the first group with formed burnout is personal detachment or depersonalization, which manifests itself in a complete or partial loss of interest in the subject of professional activity. Then it grows into an anti-humanist attitude, working with people seems uninteresting, it does not satisfy, does not represent social value. Depersonalization is reflected in the distortion of relations with the immediate environment, which can manifest itself in increasing negative attitudes, cynicism of attitudes and feelings towards the subjects of their activity [13].

The analysis of the phases of burnout formation indicators of surveyed students from the first and second groups showed the severity of the “resistance” phase, which indicates the resistance of the subjects to increasing stress, the formation of protective mechanisms and the desire to have psychological comfort.

To study the personality characteristics of students with signs of burnout and without it, there was held the study of the motivation for success and avoidance of failures [33] and the identification of personal and reactive anxiety (Spielberg-Khanin's technique).

The studies have shown the presence of significant differences in the levels of reactive (52.56 vs. 41.74 (Uemp = 105, p<0.01)) and personality (54.50 versus 46.15 (Uemp = 139.5, p<0.01)) anxiety between the series of students without burnout and with formed burnout. At the same time, students with burnout had a higher level of reactive and personal anxiety, which indicates a predisposition to anxiety reactions in response to the influence of unfavorable factors, which are manifested by feelings of vague anxiety, fear and anxious expectation. On the one hand, anxiety contributes to the concretization of the source of danger, the study of the alarming situation (even a perceived one), on the other hand, at high rates it can lead to disorganization of behavior, inadequate actions, passivity. It is known that a high level of anxiety is one of the factors that reduce the stability of the subject to stress factors [16]. We found a positive correlation between the final index of emotional burnout syndrome and situational (rs = 0.52, p<0.01) and reactive anxiety (rs = 0.281, p<0.01) of students. So, the more students are in the state of anxiety as a reaction to the impact of stressors, including socio-psychological ones, the higher is their predisposition to anxiety reactions in response to adverse factors, and the higher is the probability of their burnout as a mechanism of psychological defense in response to psycho traumatic effects.

| Symptom of emotional and moral disorientation | 9.35±3.09 | 10.11±4.11 | 12.21±4.89 | 10.54±6.63 | 14.39±4.58 | 15.91±7.26 |
| Symptom of expanding the sphere of saving emotions | 4.91±4.36 | 3.56±3.28 | 11.02±4.53 | 12.23±7.41 | 21.78±6.06 | 16.72±8.78 |
| Symptom of reduction of professional duties | 12.32±3.91 | 12.22±3.93 | 18.11±6.13 | 15.31±5.63 | 23.11±4.42 | 20.27±6.9 |
| Phase of resistance | 43.32±7.57 | 42.67±11.67 | 61.51±12.41 | 58.07±10.52 | 85.44±13.06 | 76.09±15.73 |
| Symptom of emotional deficiency | 5.21±4.32 | 12.11±8.21* | 13.89±6.20 | 14.15±4.67 | 17.28±5.82 | 20.09±5.58 |
| Symptom of emotional withdrawal | 4.41±2.74 | 8.11±5.6 | 9.62±4.77 | 8.08±5.28 | 16.78±6.56 | 13.73±7.38 |
| Symptom of personal withdrawal | 2.85±3.25 | 4.56±4.13 | 12.32±7.89 | 3.38±3.31* | 23.22±6.15 | 15.55±9.00* |
| Symptom of psychosomatic and psycho-vegetative disorders | 4.38±2.83 | 6.11±6.77 | 8.36±4.67 | 12.62±5.2* | 17.06±6.10 | 15.27±6.9* |
| Phase of exhaustion | 16.85±6.73 | 30.09±7.15 | 44.19±7.77 | 38.23±8.64 | 74.33±14.17 | 64.64±14.34 |

Note: The differences between group 1 and group 2 are statistically significant (p<0.01).
The comparison of the level of achievement motivation in the groups of students with distinct signs of burnout and without them showed a significantly lower level of achievement motivation with the tendency to avoid failures in the groups of burnout students compared to students without burnout (8.33 and 13.02 (Uem = 134, S. p0.01)). During the study a negative correlation was also found (rs = -0.658, with p0.01) between the level of the achievement motive and the final indicator of burnout syndrome within the students, which is explained by the motivating function of emotions and their role in regulating the activity [34]. Individuals with a high level of burnout during their activities tend to avoid the psychological discomfort that can arise if the activity is not successfully implemented, they fulfill it as a painful necessity, accompanied by negative emotional experiences, self-doubt, anxiety, fear of criticism, failure.

Since educational activity assumes developed cognitive motivation, as well as practical and professional, we conducted the study of educational motivation of students in the pedagogical university (using the questionnaire of Pakulina S.A.), we studied the series of students enrolled in educational programs with a strengthened practical orientation (group 2). The results of the study made it possible to distinguish the predominance of internal motives at each stage of the training. When enrolling in the university, students had the motives determining the educational activity at the initial stages of training. In the middle of the learning process students had the real motives that determine the educational activity in the present. While training at the final years the students had the emergence of professional motives associated with professional activities determining the educational activity during the last years. So, among the significant motives for entering the university mentioned in the questionnaire, the students indicated the internal motive: “The desire to get a higher education” (the first place - 100%) and “I like talking with children” (the second place - 91%). In the group of real-life teaching motives, the motives for students were: “The desire to acquire deep and strong knowledge” (91% - the first place) and “The desire to use pedagogical knowledge to educate your children” (88% - the second place). In the group of professional motives, the internal motive was “Self-realization” (91% - the first place), it was followed by the internal motive “To achieve social recognition, respect” (76% - the second place). The analysis of the selection of all motives for each subject and their correlation with the final burnout level allowed us to reveal a reliable negative relationship between the final burnout level and external professional motives (rs = -0.37, at p0.01).

**Discussion**

The results of the research aimed at identifying burnout symptoms in two groups of students of the pedagogical university studying different educational programs (traditional and practically oriented) convincingly show the burnout at the final courses in both series of student groups and the tendency to its increase among the students studying the practice-oriented educational program.

The presence of burnout symptoms at the early stage of professionalization can be associated with the role conflict and role uncertainty in the process of pedagogical practice ("Who am I? A student or a teacher?"). A student having his pedagogical practice assumes the role of a teacher, he is evaluated in terms of performing professional actions of the teacher, but at the same time this evaluation influences his academic performance, which is an attribute of another role - the role of the student. Educational programs with increased practical training and the increase in the importance of this training in general professional work can lead to even greater role mismatch, increased anxiety among students and the creation of a stressful situation, which ultimately leads to an increase in the number of students with burnout.

As another version of the presence of burnout symptoms, one can consider the negative impact of the learning stress caused by insoluble contradictions in the educational process that were described above. In favor of this assumption, there exists the significant correlation between the stress level and the final burnout level (rs = 0.364, at p0.01), the research data provided by Lin Shu-Hui & Huang Yun-Chen [2], Matyushkina [23], Ivanova [31] also shows the stress conditionality of student burnout.

The carried out research of the motivational sphere of students aimed at the identification of personal motives (the motive of achievement and the motive of avoiding failures), as well as the educational motives in the pedagogical university, which made it possible to identify certain interrelationships between the final burnout index and certain types of motives, suggests that burnout is typical for students with high level of situational and personal anxiety, low level of motivation for achievements, predominance of internal motives of teaching over external ones. All these features can enhance the experience associated with the performance of professional activities, and lead to the development of burnout. Thus, studying and working in stressful conditions, with an unclear responsibility for the professional activities, can also lead to the development of burnout and remain indifferent to the others, which is related to the key role of the personal factor in the development of early burnout.

**Conclusion**

1) The phenomenon of early burnout can be regarded as a consequence of the negative impact of educational stress or as a consequence of the role conflict between the various roles that the student performs within his practical training: the role of a teacher, assuming the implementation of professional, practical actions, and the role of a student, including the implementation of training activities.

2) As a characteristic feature of burnout, there can be noted the predominance of identical symptoms in the phases of stress (anxiety and depression) and resistance (inadequate selective emotional response).

3) In the structure of motivation of students with burnout, the low level of motivation for achievements prevails.

4) The determining factor that influences the appearance of burnout symptoms is some personality traits of students (high...
anxiety, low stress resistance), reinforcing the response to a stressful situation (educational or role conflict).

References
