

Reflexive methods in the formation of the reflexivity of students with different types of anxiety during the adaptation period

*M Yu Burykina**, *O V Golenkova*, *S V Komarova*, *L G Kuracheva*, and *O V Malkina*

Ivan Petrovsky Bryansk State University, Russian Federation

Abstract. The paper presents the study of the reflexivity of pedagogical students with different types of anxiety during the adaptation period. The authors identified the peculiarities of the interaction of anxiety and reflexivity in students during the period of adaptation to the educational environment of a higher educational institution and determined the conditions for the use of reflexive methods as possible motivational determinants of students' mastery of professional skills. The findings have implications for the organization of student learning activities. The analysis and self-analysis of manifestation and nature of student reflexivity will favorably affect the quality of mastering professional skills.

Keywords: reflexivity, anxiety, adaptation to learning, reflexive methods, reflexive behavior

1 Introduction

The relevance of the study is caused by the difficulties of overcoming anxiety during the adaptation of first-year students to the conditions of study at a higher educational institution. New changing requirements for professional training, different from school, inclusion in the educational activities of university students may actualize their anxiety. Reflexivity can become a favorable factor in the regulation of anxiety states. Besides, the use of reflexive training methods will give a qualitative meaning to the mastering of professional skills by students [1–3].

2 Problem study and feasibility of the topic

Researchers addressed the study of anxiety among higher education students in connection with stress in the educational situation, the style of communication between teachers and students (V.V. Krasnova, O.P. Gredyushko, T.D. Azarnykh), with the need for affiliation, desire for approval (O.G. Milashina), decision-making in productive activities (V.V. Gulchik), emotional intelligence (O.V. Gribkova), level of ambition and self-esteem (Iknikova O.M., Puchkova E.B.), amount of training time (M.Yu. Burykina, T.M. Maslova), reflexivity (M.Yu. Burykina), subjective states (V.R. Bildanova) and others.

Reflexivity of university students is the most studied issue regarding the development of cognitive abilities (A.V. Karpov, S.A. Dupin), personality behavior, values, self-knowledge, psychological health (N.O. Amosova, M.E. Valiullina, A.M. Dvoinin, G.I. Danilova, S.A. Penyaeva, A.I. Sannikov), interpersonal attitude and communication (I.N. Zinik, O.V. Karateeva) with the level of professional education (A.K. Samoilichenko, A.A. Tokmakova),

information and psychological impact (A.V. Lyashuk), with academic performance and activities (B. Messer, G.S. Penyakova, O.V. Filatova), adaptation phenomena (N.M. Golubeva), different types of anxiety (M.Yu. Burykina).

The relationships between the level of anxiety of first-year students during the period of adaptation to study at the university and their reflexivity in general, as well as its individual components, still remain open. The focus of our study is on anxiety and reflexivity in the aspect of adaptation to the conditions of study at the university. From the standpoint of phenomenological (C. Spilberger, A.M. Parishioners, V.M. Astapov, I.V. Dubrovina, L.I. Bozhovich, I.V. Imedadze, N.D. Levitov, V.R. Kislovskaya, L.M. Kostina, K.R. Sidorov) and level (I.A. Kiryushkin, I.V. Imedadze, G.T. Gabdreeva, Yu.L. Khanin, E.E. Malkova) approaches we studied the nature of anxiety of first-year students of pedagogical fields of training. The core of the study of anxiety most accurately reflects the point of view on the content of the concept of anxiety by B.G. Meshcheryakov, V.P. Zinchenko: anxiety is an individual psychological feature that manifests itself in a person's tendency to frequent and intense experiences of the state of anxiety, as well as in the low threshold for the occurrence of this state.

We were interested in reflexivity as a mechanism of self-knowledge and self-understanding, self-control and self-regulation, self-determination, as the ability of the subject to control his states and attractions, freedom of choice, his life, adequacy of self-esteem, which is an indicator of the development of reflexive abilities in the process of reflection of the situation by the subject and his own capabilities (E.I. Isaev, V.I. Slobodchikov A.V. Karpov, V.V. Ponomareva, D.A. Leontyev).

Reflexivity (A.V. Karpov, D.A. Leontiev) was considered as "a qualitatively special property of an

* Corresponding author: mabur03@yandex.ru

individual ensuring awareness of something and representation of the psyche of its own content”, while the construct “reflection”, unlike “reflexivity”, is presented as “the ability of a person to arbitrarily turn his consciousness to himself”.

3 Methods and materials

To implement our plan we used the Methodology for Determining the Level of Reflectivity (A.V. Karpov, V.V. Ponomareva), Differential Type of Reflection (D.A. Leontyev, E.M. Lapteva, E.N. Osin, A.Z. Salikhova), Scale for Assessing the Level of Reactive and Personal Anxiety (C.D. Spielberg, Y.L. Hanin).

In total, 72 respondents took part in the survey: female first-year students of the full-time bachelor education studying at Bryansk State University named after Academician I.G. Petrovsky (pedagogical profile). The average age was 19.5 years, the minimum – 17 years, the maximum – 22 years [4–6].

4 Purpose of the study

To identify the peculiarities of the mutual influence of anxiety and reflexivity in students during the period of adaptation to the educational environment of a higher educational institution and determine the conditions for the use of reflexive methods as possible motivational determinants of students’ mastery of professional skills.

5 Results and discussion

We compared the results of the Reactive and Personal Anxiety Assessment Scale (C.D. Spielberg, Y.L. Hanin) with the test norms indicated by the authors and obtained the following quantitative characteristics. Low situational anxiety (up to 30 points) was typical for 14 %, moderate (31–44 points) – for 43 %, high (45 or more points) – for 43 %. Low indicators of personal anxiety were not observed, moderate and high levels were recorded in 38 % of students, high – in 62 % of respondents.

Significant results of situational anxiety are equally consistent with moderate and high levels. It can be assumed that students with a high level of situational anxiety in the assessed educational situation experience subjective discomfort and anxiety. The state of anxiety depends on the time and force of impact of the assessment situation.

The majority of respondents are characterized by a high level of personal anxiety. They have a tendency to feel threatened in any life situation, including in educational activities, close to stress, which can be a manifestation of neurotic conflict. The factor that actualizes anxiety can be the adaptation period to the educational environment of the university, the development of new forms of education, behavior strategies, understanding of the new status and social environment. High values of personal anxiety indicate the expectation of anxiety in the assessment situation, difficulties in performing educational tasks. Students with low anxiety are not really active in educational activities, have unformed educational motivation and interest, responsibility for the results of educational tasks.

The study of the reflexivity of female students (Methodology for Determining the Level of Reflexivity (A.V. Karpov, V.V. Ponomareva), Differential Type of Reflection (D.A. Leontyev, E.M. Lapteva, E.N. Osin, A.Z. Salikhova) indicates a low level of reflexivity (less than 4) among first-year students (43 %), moderate (5–6) – 57 %, high – not noted in anyone. Students in the adaptation period are least capable of reflecting their activities and actions, analyzing the results of their own activities, its details. A significant part of students find it difficult to put themselves in the place of another person.

The interpretation of the quantitative values of the reflexivity components allows paying attention to the low integrative indicator (3.5). Based on the test norm, students are least likely to analyze their own activities and actions of other people. It is difficult for them to establish causal relationships of actions in time (past, present and future). They do not tend to think about the details of the activity, its planning and forecasting of results.

The highest values of systemic reflection relative to other components of reflexivity indicate a tendency to introspection and analysis of what is happening, to make decisions in specific life situations. Introspection and quasi-reflection are little expressed and the indicators are low.

The comparison of average reflectivity values for situational and personality anxiety grouped by median is confirmed by Mann-Whitney U-test data. First-year students with high level of personal anxiety are most prone to introspection, self-scrutiny. They focus on their own state, thoughts and experiences. In some positions the ability to self-distancing, desire to look at themselves from the outside, great responsibility are observed in the group of participants with a high level of personal anxiety. The actions of students are aimed both at the pole of the subject and the object. This characteristic is correlated with the “systemic reflection” scale indicating a productive and adaptive type of reflection, which, according to D.A. Leontyev, E.M. Lapteva, E.N. Osin and A.Z. Salikhova, is an indicator of personal maturity.

Based on the analysis of the obtained data, we considered reflexivity as a possible determinant in overcoming the pronounced anxiety of students during their adaptation to study at the university. Besides, in the course of professional training the teacher needs to acquire reflective competencies, including self-understanding, self-control and self-regulation, constructive attitude to his own activities, ability to adequately assess it, as well as the presence of a professional-personal position, the desire to personally and professionally grow, develop.

Adaptive, motivational, goal-setting, organizational, regulatory functions of student reflection become a factor in reducing anxiety at the beginning of mastering professional skills. The strategy for the formation of reflective behavior involves the use of reflective teaching methods during the teaching of psychological and pedagogical disciplines.

Reflective methods are methods of forming active, independent, creative understanding of educational and cognitive activity, individualization of content, depth and pace of learning.

We relied on the classification of reflective methods (analytical, narrative, graphic and interactive) systematized by L.G. Kuracheva [7]. Let us discuss each of them in more detail.

Analytical methods are aimed at assessing and analyzing achievements, knowledge on a certain topic, problem, course section, discipline. The result of the application of these methods in the educational process will be the ability to consider phenomena from different points of view, in general, the ability to analyze. For example, “Fill in the columns of the table: plus – minus – interesting; easy – difficult – important – summary”, “Lecture diary”, “Three-part diary” [8].

An example of an analytical method is the use of a portfolio, which involves a reflective analysis of students’ achievements, providing an opportunity to express an emotional attitude towards new achievements. The portfolio can include notes and task scenarios, a diary of teaching practice, examination protocols and speech maps; a logopedic file, didactic materials, children’s works and their analysis, photographs, created multimedia products, as well as comments and external assessments of these works.

Narrative methods contribute to the development of the skills of scientific analytical thinking, self-esteem and the ability to reasonably state the position in the form of a narrative. The techniques that implement these methods include different types of essays: analytical (on the issues proposed by the teacher), problematic (independent identification of a significant problem and proof of its relevance), essay, cinquain.

One effective reflective technology is to write essays. The genre of essays requires a student to pay attention to his own feelings, experiences, thereby giving him the right for subjective presentation and expression of his attitude to the considered problem [9].

Regular use of essays on various subjects from year to year of study allows tracing the dynamics of the formation of a student as a professional. The practice of writing essays begins at the beginning of studies. Students in the first year write the essay on the topic “Teacher in the Modern World”, in which they conceptualize their motives for entering this specialty and express the expectations of studying at the university.

The analysis of the essay shows awareness of the relevance of the chosen profession. For example, ‘Currently, a large number of people have all sorts of speech defects. The profession of speech therapist is in great demand, people need it. Wrong speech, wrong pronunciation are quite common’.

In their essays first-year bachelors indicate ways to achieve the goal and the necessary qualities:

- serious theoretical and practical training, self-improvement, responsible approach to learning: I see the goal – I pursue the goal; hard work; I want to become a good specialist, a skilled specialist;
- mastering knowledge in the field of psychology, since a speech defect entails violations in the field of communication, personal sphere: “I want people to get rid of the defect, look at the world with different eyes, where there is no constant fear of society, some kind of embarrassment”;
- love for the chosen profession: the main thing is to love what you do and do what you love;
- love for children: a teacher working with children makes a contribution to their tomorrow;
- creative search and expression: realization of oneself as a person [10].

It is possible to build an ideal image of a teacher based on the results of the analysis of the essay. So, a person who has associated himself with such a difficult profession should have responsibility, be able to make independent decisions in various non-standard situations; be able to find an approach to any person, child or adult. The most important quality for a teacher is to love your work. The pedagogical profession requires tremendous knowledge (knowledge in the field of medicine, modern achievements of defectology, foundations of the Russian language, psychology, etc.); skills, certain personal qualities. The important qualities of a teacher from the position of first-year students include restraint, tactfulness, punctuality, accuracy, responsibility, initiative, determination, confidence, rationality. The teacher needs to have, first of all, patience, benevolence, desire to help. It is important to be able to work with family, to take into account the psychological state of parents and children, to be able to create a developing environment. Awareness of ideal qualities sets a vector to the further development of the personality in the learning process, exposes the value orientations and motivation of students.

The essay turns out to be a fairly informative tool that helps a teacher to understand the features of students and intensify the mental activity of students, contributes to the reflection and formation of significant qualities of a future teacher, reduced anxiety from the uncertainty of the upcoming training.

Students are offered reflective tasks: “What does successful socialization mean for me?”, ‘The meaning of methodology in my life and activity’, etc. One of the interesting options can be writing essays on read primary sources. In the process of presenting their thoughts and reasoning, students are offered an essay writing plan that contains four obligatory parts.

Introduction. It usually has an introductory and abstract statement. It is composed in such a way as to interest the reader. It may include a well-known statement, quote, question. The thesis is given the control power disclosed in the final sentence of the introduction.

Main part. It reveals the essence of the problem and provides the necessary evidence of the point of view.

Waiting for objections. Any statement can have the opposite view, and you need to be ready for it. The essay on the history of psychology implies the presence of contradictions, disagreement with the evidence, doubt. After considering the objections, it is necessary to propose options for a solution and point out the weaknesses of the opposite point of view, thus defending the opinion.

The conclusion combines the argument itself, the second version of the thesis and the final statement. The text itself represents a holistic reasoning, own thoughts obtained after familiarizing with the original sources. Despite the fact that the assessment of an essay takes into account personal opinion, the use of scientific terms and facts, references to literature read during the work is mandatory.

The analysis of the essays made it possible to distinguish different levels of such work: from mature, creative, completely independent work performed brightly and extraordinarily, producing the most favorable impression, to rather weak works retelling other people’s thoughts without signs of personal creative attitude, or written off or downloaded from the Internet.

Graphical reflective methods allow updating the intellectual potential of students in the form of various schemes, drawings and collages. The result of their application is a reflective analysis of the assimilation of a specific topic, section or the whole discipline. The techniques for implementing graphic methods include: compiling a reference collage scheme based on educational materials (Tree of Predictions by J. Bellance; Stalker – compiling a movable diagram of three zones: from the “misunderstanding” zone of the topic, the section of the discipline through the “path” zone to the “understanding” zone).

Interactive reflective methods stimulate the interaction of students in the process of studying complex issues of theory and practice, self-assessment of the quality of educational results. The result is the ability to independently solve professional problems based on reflective activity.

An example of the use of reflexive technologies in the learning process is the acquaintance of students with methods of psychocorrection and psychotherapy through modeling elements of practical work in the traditions of psychodrama and gestalt therapy, Rogerian psychotherapy, the use of elements of game therapy, fairy-tale therapy, sand therapy, etc.

The most relevant was the work with fairy-tale images. The use of this method becomes possible due to the fact that the choice of a character, its interpretation is not an accident. Students reflect on the following during a class:

- 1) knowledge on the role structure and organization of collective interaction;
- 2) idea of the inner world of another person and the reasons for his actions;
- 3) personal actions and images of my Self;
- 4) knowledge of the object and how to act with it in a situation.

In each image, a participant of the class reflects himself, discovers his adaptation problems, violated interpersonal relationships, individual ways to overcome problems in a number of parameters. Let us list them in relation to the analysis of fairy-tale characters: the emotional background of the story, the number of heroes in a fairy-tale, the activity of the main character in organizing the “psychological space”, the degree of awareness and verbalization of emotional experiences.

The fairy-tale contains a huge life-affirming meaning, good always defeats evil, each character has not only weakness or power, but also resources. Since a fairy-tale helps to reveal unconscious processes, it makes it possible for a person to realize his real problems and resources for solving them, which at a conscious level can be difficult to formulate.

Due to our personal characteristics, we choose certain archetypal images, absorb these archetypes and build our behavior in a certain way. Such interpretations become a real revelation for students. Characters familiar from childhood turn into completely unexpected sides, actions receive a different assessment, there is a genuine understanding and empathy.

There are many interpretations of each fairy-tale image that cannot be imposed from the outside, it can only be lived and generated. Therefore, in the class the participant may accept the opinions of his classmates, or may not agree with them. Based on the fact that the symbol is ambiguous,

presented in an endless semantic perspective, it is important not only to realize the problems, but to identify the resources of a fairy-tale image (hero). Each fairy-tale situation (conflict between fairy-tale heroes, cunning, group problem-solving, using magic gifts, transferring responsibility to another person, etc.) has several notions and meanings.

The analysis of fairy-tale images is an effective means of studying the peculiarities of organizing your own life, awareness of the peculiarities of interpersonal relations, finding approaches to solving life problems, identifying the causes of anxiety and, in general, psychological problems of an individual and ways to solve them.

The consistent use of various groups of reflexive methods allows overcoming pronounced anxiety, adapting to the conditions of higher education, forming the reflexive competencies of a teacher:

- ability to analyze the patterns of the historical process, conceptualize and analyze significant sociocultural problems professionally and personally, to be aware of and express personal worldview and civic position;
- willingness to be aware of the social significance of one’s profession, motivation for professional activities;
- ability to organize, improve and analyze personal educational activities.

The consistent use of reflective methods leads to the fact that students begin to show abilities for self-knowledge, introspection; are aware of and regulate their emotions in relation to what is happening. All this allows mastering various types of reflection, assessing the current situation, conducting retrospective analysis, and designing further activities.

6 Conclusion

There are significant links between students’ anxiety levels and their reflexivity in general, as well as its individual components. If in a specific situation of activity that requires solving certain problems, a person focuses on analyzing an object that is not related to an actual problem, then the uncertainty of the situation increases, the possibility of a qualitative solution to the problem decreases, which leads to an increase in situational anxiety. At the same time, if in a specific situation a person focuses on analyzing and planning his future activities, the uncertainty of the situation decreases, the ability to qualitatively solve the problem increases, which leads to a decrease in situational anxiety.

With an increase in personal anxiety a person begins to mainly focus on his own state, his own experiences, he does not have time to rationally analyze the tasks and problems in his life, he ceases to control his life and the level of its uncertainty increases. With a decrease in personal anxiety a person gets the opportunity to distance himself and look at himself from the outside, analyzing both the process of his life and his experiences, this allows solving life problems, reducing the uncertainty of life.

The use of reflexive methods determines strategies for reflexive behavior at different levels of anxiety. The reflection of the results of the learning tasks increases the adaptability of students to new training conditions, strengthens the awareness and analysis of situations of interpersonal interaction.

References

1. N.A. Astashova, O.V. Malkina, *On the development of the dialogue space in the work of the student discussion club "Point of View"*. Letters to the Emission. Offline Letters: electronic sci. J. **8** (2017). ART 2558. Retrieved from: <http://emissia.org/offline/2017/2558.htm>
2. N.A. Astashova, O.V. Malkina, The value of pedagogical work and career orientations of contemporary teacher. Proc. of the Smolensk state univ. **2** (30), 315–326 (2015)
3. N.A. Astashova, O.V. Malkina, The development of the interactive space in the work of the discussion club "point of view". Letters to the Issue. Offline **8**, 2558 (2017)
4. M.Yu. Burykina, Features of anxiety of bachelor students of pedagogical profile. Int. J. of Med. and Psych. **1**, 62–68 (2020). ISSN 2658-3313
5. M.Yu. Burykina, Features of reflexivity of bachelor students of pedagogical profile. Modern sci.: current probl. of theory and pract. Cognition series **4**, 47–54 (2020). ISSN 2500-3682
6. M.Yu. Burykina, O.A. Dorontsova, Comparative characteristics of the abilities of self-management and self-regulation of behavior of adolescents with different levels of autonomy Izvestiya Saratov University. A new series. Acmeology of education. Psychology of development. Saratov State National University. research. un-T **3**, 239–243 (2017)
7. L.G. Kuracheva, *Understanding and creation of metaphor in preschool education*. World of psychol. **1**(81), 148–153 (2015)
8. L.G. Kuracheva, *Working with the symbols of fairy-tale-tale images in solving life problems*, in Materials Conf. Education and science as a factor in ensuring Russia's competitiveness on the world stage, Bryansk, March 27–28 (2013)
9. L.G. Kuracheva, Professional self-determination of psychology students. New in psychol. and pedag. res. **2** (42) 119–125 (2016)
10. N. Matyash, T. Pavlova, S. Komarova, O. Golenkova, *Influence of the reflexive position on the regulation of the students' emotional sphere*, in Proceedings of the ix international scientific and practical conference "Current problems of social and labor relations" (ISPC-CPSLR 2021), Vol. 646 (Amsterdam, Atlantis Press, 2022)