

Research on the Psychological Adjustment of University Students in Science and Engineering Colleges from the Perspective of Positive Psychology

Xiaojing Xu¹

¹Teaching and Research Guarantee Center, Army Engineering University of PLA, Nanjing, Jiangsu, China.

Abstract

College students will encounter a variety of psychological problems in their daily study and life. In science and engineering colleges, due to the specialty, the psychological problems faced by college students are more complex and diverse. Different from the cognition of traditional psychology, from the perspective of positive psychology, this paper makes an in-depth study on the psychological problems commonly encountered by college students of science and engineering.

Keywords

Positive Psychology; College Students' Psychology; Science and Engineering Colleges and Universities.

1. Introduction

Positive psychology is a psychological trend of thought that uses the relatively perfect and effective experimental methods and measurement means of psychology to study the positive aspects of human strength and virtue.[1] Corresponding to positive psychology is the traditional mainstream psychology. Traditional mainstream psychology simply believes that mental health is no psychological disease or psychological problems, or simply attributed to the pathological mode of biomedicine. This view has the limitations and lag of technological development. The research object of positive psychology is the average level of ordinary people. It requires psychologists to look at human potential, motivation and ability with a more open and appreciative perspective. This is very different from the traditional psychological research. In college students, mental health problems are very common. With the development of society and the development of information technology, people's information in life is not the same. At present, most of the college students are the new generation born in the 21st century, and their mental health problems are more complicated and diversified. Especially in Colleges and universities of science and engineering, due to the monotony of specialty setting, the living and learning atmosphere is relatively depressing and boring, which easily leads to students' mental health problems. Traditional psychology often explains the negative emotions and behaviors of human beings. In fact, in real life, we need psychology to help people pay more attention to the positive aspects of human nature, so as to help people get a healthier, more positive and better life[2]. It is of practical significance to study and analyze the psychological problems of college students from the perspective of positive psychology.

2. The Learning Status and General Psychological State of Students in Science and Engineering Colleges

In China's higher education, the learning atmosphere of students in different professional colleges is quite different. Music, Art, Sports colleges and universities have various forms of

curriculum, including not only theoretical courses taught in the classroom, but also many professional courses such as physique, vocal music and outdoor sketching. The cross change of learning environment can help students better change their learning mode. The physical and psychological interactive learning can also relieve the pressure brought by intense learning to a certain extent. The school is rich and diverse, the campus environment atmosphere will be more active, the student association organization is sound and energetic, not only can satisfy the lively student to carry on after-school entertainment, the exercise demand, but also to a certain extent also gives the disposition introvert, the bad human relations student has some very good drive function.

In daily learning, some students may have anxiety, boredom and other psychological problems, can be involved in some physical exercise courses or after-school activities for effective release of pressure, ease emotions. The overall atmosphere of science and engineering colleges and universities is very different from that of comprehensive colleges. First of all, due to the specialty of science and engineering colleges, most of the subjects set up in Colleges and universities are mathematics, physics, chemistry, computer and other natural science courses. In terms of curriculum setting and student training, students' interest in learning is easy to fall into a depressed psychological state This kind of bad mood in learning will also have a negative impact on his personal life. Moreover, the academic pressure of science and engineering colleges is great, and students need to spend most of their time and energy in heavy learning to cope with the higher requirements of learning assessment.

Therefore, the student union is in a state of mental tension for a long time. At the same time, if the school lacks the corresponding adjustment in curriculum setting, over time, more students will have different degrees of psychological problems. Moreover, science and engineering colleges and universities are often characterized by physics, chemistry, computer and other majors. The whole specialty setting is basically related to natural science, and the curriculum type is relatively single. Lack of Humanities and art science learning is not conducive to the cultivation of students' positive and sound psychological state. In the four-year learning process of the whole university, the basic combination of theoretical and experimental courses, students' learning environment is also very monotonous, lack of adjustment in daily life, when some psychological problems appear in the early stage, we are busy learning theoretical courses and doing experiments, and it is difficult for students with psychological crisis to find a self relaxing and decompressing environment. In addition, a lot of time is occupied by busy learning. In addition, the school curriculum is too single, and most of the time students spend on learning. They lack the opportunity to communicate with each other and have no rich extracurricular activities. Moreover, the communication circle is relatively narrow. The mental health of science and engineering students is limited by time and space, which leads to the emergence and aggravation of psychological problems to a certain extent.

3. The Psychological Problems Commonly Encountered by Students in Science and Engineering Colleges

3.1. Adaptability

Adaptability is a common psychological problem among college students. After entering the University, although the degree of physiological development of college students is approaching maturity, they have put a lot of personal time and energy into their study for a long time. Before entering the University, the crowd they contact is relatively limited, and the scope of interpersonal communication is mostly family members, teachers and classmates. Because of this, adolescent college students' psychological development is not enough exercise, the degree of development is not mature, the ability to adapt to the surrounding environment is

poor, easy to cause a series of psychological problems, especially in some things beyond their own cognitive scope, it is very easy to cause adverse psychological reactions.

Similarly, from middle school to university, students' learning environment has changed greatly. With the growth of age and the change of personality, at the same time, the different learning content and learning environment in university stage, college students gradually find that the old learning methods can not adapt to the new environment changes. Many students with outstanding achievements will have a significant decline in their academic performance, resulting in a large psychological gap, thus causing psychological contradictions and self-questioning, and deriving learning motivation. Lack of learning attitude is not correct, learning interest is not high. Especially in the universities of science and engineering, the proportion of male students is high, and there will be obvious polarization when they encounter psychological problems. Cheerful, positive boys will take the initiative to overcome difficulties and seek help from others. However, there will also be quite a number of introverted boys who are sensitive and suspicious, afraid of expression, and have strong self-esteem, which will lead to serious and expanded psychological problems. At the same time, the change of learning environment, the change of teachers and the change of class will have a certain impact on the adaptability of college students, so that college students have to face the pressure of adapting to the environment[3]. Especially in the universities of science and engineering, the pressure of learning and competition is great. At the same time, the changes of living environment and various factors will lead to the maladjustment of freshmen to a great extent, which will lead to a series of problems of adaptability.

3.2. Interpersonal Problems

With the rapid development of information technology, people have different ways and types of access to information. In the life surrounded by different information, everyone has developed a different world outlook, outlook on life and values. Therefore, everyone has different ability to adapt to the environment and solve problems. Everyone's ability to adapt to the environment, values, social background are different, and the interpersonal situation affects everyone's work, life and mood. Man is a group animal, and man is the product of society. It can be said that interpersonal relationship is the foundation of the relationship between human and society. With the growth of age, the psychological development of college students is increasingly mature, they will gradually derive a variety of psychological needs, on the one hand, they urgently want to establish contact with the society, on the other hand, they lack the ability to adapt to the society and correctly understand the society, and then find the estrangement and contradiction between the psychological needs and the reality, which will lead to a series of psychological imbalances among college students. The most obvious problem is the problem of interpersonal communication barriers.

In the current society, basically are only child families, many college students are living in the care of their parents, in a family, not only from the parents' love, often also from grandparents' care, in such a family environment, in the greatest extent to meet the needs of the only child. This will result in the only child in dealing with interpersonal problems, more attention is paid to whether self-interest is satisfied, ignoring the interests of others and communication experience. To be specific, rebellious, selfish and wayward have become their unique "labels". In the process of interpersonal communication, these college students are often used to taking self-demand as the center, lacking the consciousness of considering others, and go their own way, and even have problems such as being out of group, suspicious and alert. This kind of imperfect personality and social psychological state developed from childhood State, not only affects the mental health of college students, but also affects the normal communication between teachers and students. In Colleges and universities of science and engineering, students' learning pressure is generally relatively large, most of the time is spent on learning,

less time can carry out interpersonal communication, lack of interpersonal experience, but also exacerbated the interpersonal problems of college students.

3.3. Character and Emotion

In the era of rapid progress of information technology, people's life is full of all kinds of information. The fast food culture causes people to lack independent thinking ability and critical thinking, easy to follow suit, and easy to be affected by complex social factors in character cultivation and emotional management. The formation of College Students' character and emotion is inseparable from their growth environment and experience. In particular, the new generation of college students, basically born in the 21st century, are exposed to a more complex and diverse environment, which also has a very important impact on the cultivation of emotions and personality.

At present, most of the college students are from one-child families. They are favored by their parents since childhood. They generally have poor ability to control emotions and resist setbacks. When dealing with problems, they are easy to do whatever they like, regardless of the consequences. Reflected in interpersonal communication, the most obvious phenomenon is to take the individual as the center, and seldom take into account the feelings and demands of others. At the same time, due to growing up in a smooth environment for a long time, when encountering some things beyond their expectations, their ability to resist pressure and solve problems is weak, which will lead to the tendency of emotional out of control and negative personality. In Colleges and universities of science and engineering, personality problems are more complex in terms of mental health. Most college students' psychological problems include isolation, inferiority complex, extreme, autistic, etc. when dealing with daily problems, such as interpersonal relationship, completing learning tasks, participating in competitions and participating in collective activities, if they fail to meet the expected requirements, they will have corresponding problems Emotional problems. Due to the weak ability to resist pressure and deal with problems, it is easy to have negative tendencies such as depression, anxiety, irritability, mania, depression, timidity, fear, etc. for example, many college students will have tension and anxiety when facing major examinations. If this kind of bad mood is not timely and correctly adjusted, it will also cause adverse physiological reactions. For example, excessive tension and anxiety can lead to anorexia, sleep disorders and a series of problems [4]. It not only affects their own test play, but also has a negative impact on the psychological and physical health of college students. This phenomenon is more prominent in science and engineering colleges, and there are certain gender factors in it. In Colleges and universities of science and engineering, the number of male students is usually the majority. Compared with girls, boys are not enough in self-expression. When some psychological problems appear, they can not be effectively solved. Compared with other comprehensive universities, the overall school atmosphere is not very active.

4. From the Perspective of Positive Psychology to Study Such Psychological Problems

First of all, based on the purpose of prevention in the bud, the implementation of effective prevention is the best governance means. College teachers should popularize and introduce some basic psychological knowledge to college students and help them master the recognition of basic psychological problems and scientific and effective adjustment methods. It can not only help students solve their own mental health problems in time and effectively, but also save the management cost of college teachers for students to a certain extent. At the same time, it also makes college students clear the importance of mental health education. Bruner, a famous foreign scholar, believes that all disciplines are integrated and interrelated. Only by mastering the potential connections in disciplines can we sum up the experience beneficial to teaching

and learning[5]. Therefore, through the teacher to the students to popularize the basic knowledge of mental health, can help students in their own mental health from passive acceptance to active exploration. When college students consciously explore the knowledge of mental health education, they can imperceptibly promote themselves to try the basic activities of mental health education. There is an old Chinese saying that it is better to teach people to fish than to teach them to fish. It roughly means that helping others with results is only temporary. Only by helping them master the methods and ideas to solve problems, can we better help others give full play to their subjective initiative and help students better solve their own problems from the perspective of positive psychology. The effective practice of the concept of positive psychology can make college students experience positive factors in life and achieve the ideal state of physical and mental harmony. At the same time, colleges and universities should cultivate students' positive ideas of self-education and help them form psychological self-healing ability. Teachers' indoctrination and teaching will never be more efficient than college students' active learning. Only when college students learn self-learning and understand the existence of mental health knowledge, can they identify their own psychological barriers in daily life and learning and reduce the probability of psychological problems.

Secondly, under the condition of popularizing basic mental health knowledge, students should be trained to master simple and feasible mental health maintenance skills. To construct a scientific and reasonable mental health education system, the key is to cultivate college students how to achieve self-regulation. In life, we can organize students to carry out psychological class meeting for a topic, in which teachers can guide. The number of psychological class meeting is often large, so we can carry out activities in the form of group counseling, increase more psychological experience in the interaction, and use the method of positive psychology to help students feel the benefits of mental health activities more actively and deeply. Positive psychology emphasizes that everyone has the possibility and ability of development, and emphasizes the positive role of each person's natural potential in solving their own psychological problems and promoting their own growth. Only when college students have mastered the methods of maintaining mental health, can they work out psychological adjustment methods according to local conditions and their own conditions. Only in the face of difficulties in calm thinking, make a correct judgment. We should teach college students to be good at daily accumulation, cultivate good living and learning habits, and be good at thinking when encountering problems; we should also teach college students to correctly deal with interpersonal relationships and quickly adapt to the surrounding environment. Only by integrating themselves into the society and the collective, can they establish a relationship between themselves and society, so as to avoid interpersonal barriers.

While guiding college students to avoid psychological problems, we can not only limit ourselves to the traditional psychological cognition. Today's social environment is becoming more and more complex and diversified, and people's psychological cognition will also change imperceptibly. Therefore, the traditional mainstream psychology has certain social limitations and lag. Traditional mainstream psychology simply believes that mental health is no mental illness or psychological problems, or simply attributed to the pathological mode of biomedicine[8], which is obviously not true today. With the development of medical psychology, the essence of mental health problems that we have not found before has been revealed. If the content of College Students' mental health education is too narrow according to the traditional psychological point of view, emphasizing that those individuals with emotional distress, behavioral disorder and adaptation difficulties are taken as the main service objects, and the education of the general college students is ignored, it will lead to a temporary cure rather than a fundamental solution to the problem.

5. Conclusion

From the perspective of positive psychology, this paper analyzes the psychological problems of science and engineering college students. Positive psychology emphasizes the study and discussion of psychological problems from a positive perspective. Therefore, from the standpoint of positive psychology, college students' mental health education should pay more attention to the developmental goals of college students, optimize their psychological quality with positive ideas and ideas, cultivate and improve their personality, so that they can actively adapt to the society, actively deal with problems, and have a positive attitude towards life. Not only in real life to help students solve mental health problems, but also to help students really master the root and method of actively exploring psychological problems, from passive acceptance to active exploration, only in this way, can we better help college students build positive and healthy mental health, improve psychological energy and self cognitive ability.

References

- [1] Sheldon M, King L. Why Positive Psychology Is Necessary. *American Psychologist*, 2001, 56 (3): 216~217.
- [2] Myers D. The Funds, Friends, and Faith of Happy People. *American Psychologist*, 2000, 55(3): 56~67.
- [3] Li Jinzhen, Positive psychology: a new research direction [J], *Progress in Psychological Science*, 2003, 11(3): 321~327.
- [4] Kennon M. Sheldon, Laura King. Why Positive Psychology Is Necessary [J]. *American Psychologist*, 2001, 56(3).
- [5] Ed Diener. Subjective Well-Being: The Science of Happiness and a Proposal for a National Index [J]. *American Psychologist*, 2000, 55(1).
- [6] Taylor, Kemeny, Reed, Bower, Gruenwald. Psychological Resources, Positive Illusions, and Health [J]. *American Psychologist*, 2000, 55(1).
- [7] Miller. The Benefits of Positive Psychology [J]. *The Harvard Mental Health Letter*, 2002, 18(7).
- [8] Ren Jun, Some Issues In Current Positive Psychology Movement [J], *Progress in Psychological Science*, 2006, 14(5).