Objective: Taking psychological satisfaction scale as a research tool, combined with physical exercise situation, 90 school students' psychological satisfaction was investigated and analyzed.

Subjects and methods: Taking psychological satisfaction scale as a research tool, combined with physical exercise situation, 90 school students' psychological satisfaction was investigated and analyzed.

Study design: The subjects were 90 students of grade 1 and grade 2 in 3 schools in a city. The average age of the subjects was 16-20 years old (17.6 ± 0.56 years old). Among them, 60 boys and 30 girls are involved in sports and non-sports majors.

Methods: The Affective Scale was adopted to evaluate the degree of psychological satisfaction, and the reliability of the scale was 0.76, including three dimensions, namely, common affective and negative affective balance of ten items. The score of affective balance is divided into three types, namely, (6-9), (5) and (1-4), according to the results, (6-9), (5) and (1).

After passing the group test, the subjects were required to answer the questions one by one after carefully reading the instructions according to the uniform provisions, and 90 copies were taken back on the spot, of which 83 were valid questionnaires (59 boys and 24 girls) had an effective rate of 92.2%. All data were analyzed by SPSS15.0 software, and $P < 0.01$ was the significant level, $P < 0.05$ was the significant level.

Results: The results of specific tests are shown in Table 1 and Table 2.

Table 1. Results of student psychological satisfaction survey.

Factor	Population	Sports major	Non-sports major	t	P
Positive emotion	1.98±1.12	2.12±1.07	1.7±1.37	0.844	0.382
Negative emotion	3.44±1.30	3.16±1.38	3.69±1.36	2.145	0.090
Affective equilibrium	3.86±1.36	3.07±1.60	3.93±1.56	-1.368	0.193

Note: [**] is $P < 0.01$, [*] is $P < 0.05$, P, T is the comparison between sports majors and non-sports majors, the same below.

From Table 1, it can be seen that the positive emotion of PE majors is higher than that of non-sports majors, the negative emotion is lower than that of non-sports majors, and there is significant difference ($P < 0.05$), the emotional balance is lower than that of non-sports majors. This shows that the students of P. E. major have more positive emotional experience than those of non-P. E. major, and less negative emotional experience than those of non-P. E. major.

Table 2. Emotional balance status results.

Factor	Population (83)/%	Sports (27)/%	Non-sports major (56)/%
Unbalanced (1-4 points)	49/59.0	12/44.4	36/64.3
Intermediate (5 points)	23/27.7	7/25.9	13/23.2
Balanced (6-9 points)	11/13.3	8/29.6	7/12.5

As can be seen from the Table 2, the emotional balance of the students is mainly unbalanced (59.0%), followed by the intermediate (27.7%), and the number of the balanced (13.3%), and the proportion of the active exercise students is higher (29.6%) than that of the non-sports students (12.5%). Thus, students emotional balance is not optimistic, often exercise students emotional balance ratio higher than non-sports professional students. Research shows that students with emotional imbalance are more likely to have difficulties and contradictions in contact with the surrounding environment, resulting in interpersonal relationships, depression and other psychological symptoms.

Conclusions: Coaches should be good at discovering, analyzing and dealing with students' sports panic psychology, helping them overcome all kinds of bad personality psychology, and cultivating good mood and will quality. Only in this way can the teaching quality of the training course be improved more effectively and the sports reserve talents with high quality be cultivated. At the same time, we should actively carry out the activities which are suitable for students' psychology and help them to improve their mental health, so as to realize the real goal of promoting people's physical and mental health.

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MENTAL DEMAND CHANGE OF USERS ON MODERN MANUFACTURING TECHNOLOGY

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Background: With the rapid development of industry in today's society, the change of users' psychological needs has caused great changes in the direction of social needs. Due to the diversity and frequent changes of social demands, all kinds of manufacturing technologies are parallel, and the traditional energy and market competition are increasingly tense. These changes in the objective environment pose sharp challenges to the traditional mechanical industry, forcing the mechanical industry to quicken the pace of product renewal and development so as to be able to continuously produce various new products that save energy and materials in accordance with the requirements of high efficiency, good quality and low cost on the basis of making full use of the latest achievements in modern science and technology.

Objective: In order to provide reference for the development direction of modern manufacturing technology, this paper investigates the data of user's psychological demand, analyzes the problems of user's psychology and modern manufacturing technology, and discusses the influence of user's psychological demand on modern manufacturing technology.

Subjects and methods: Using questionnaire to collect and analyze the psychological characteristics of users, deal with the data of user's behavior characteristics, build the analysis model of user's psychological needs, and sort the user's psychological needs with individualized importance. Taking a modern manufacturing product as an example, the impact of modern manufacturing technology under the change of user's needs is analyzed by applying real products.

Study design: Questionnaires were distributed to schools, hospitals, factories, office buildings and other working units of different occupations. 50 questionnaires were distributed to each occupational unit, and a total of 200 questionnaires were distributed. 198 questionnaires were recovered with a recovery rate of 99%.

Methods: The contents of the questionnaire mainly include whether the functions of the products in modern manufacturing technology are in line with expectations or acceptable, and the answers are given in the form of scores. Examples of specific questionnaire questions are shown in Table 1. At the same time, in view of this product, uses the big data technology investigation different model product sales situation, and carries on the analysis with the questionnaire result correspondingly.

Table 1. Sample questionnaire questions.

Personalized demand	Problem	Dislike	Acceptable	It doesn't matter	Prefer	Like
Smart Reminders	Provide this functionality	0	1	2	3	4
	This feature is not available	0	1	2	3	4

Results: The results of the questionnaire show that users' psychological needs mainly include the following points: (1) Charisma needs, which are realized beyond users' expectations. When a product does not have such a feature, it does not cause dissatisfaction; once a product has such a feature, users' liking for it increases dramatically. Such requirements should be retained in order to increase user satisfaction. (2) The expected demand has a simple linear relationship with the satisfaction of the user. When a product can do this, the user is very satisfied; if the product does not, the user is very dissatisfied. And the more such requirements are met, the more satisfied users are. Therefore, such requirements should be retained. (3) Essential requirements are the functions that the user considers necessary for the product. If the product does not have this feature, the user will think that the product has failed and the user's satisfaction level will not increase because of the existence of such features. This kind of functionality is required in the final product, but should not be included in the scope of customization, so this kind of requirement should be eliminated. (4) Undifferentiated needs, where the presence of such needs is so low that users do not even notice them, that the realization of such needs has little impact on user satisfaction. But for enterprises, the existence of such requirements will increase the development costs. Therefore, such requirements should be eliminated. (5) Reverse requirements, which will reduce the degree of user satisfaction and should be excluded from customization of user requirements, and are best not to appear in the final product.

Based on the survey results and big data statistics, it is found that the sales volume of this model is the highest when the user's psychological needs are charm demand and expectation demand, while the necessary, indifference or reverse demand of the user's psychological needs has little impact on the sales of products in modern manufacturing. Therefore, it shows that the user's psychological demand has a certain

impact on modern manufacturing industry, and modern manufacturing technology needs to adjust its manufacturing focus according to the user's psychological demand, so as to improve its own industry competitiveness.

Conclusions: For the modern manufacturing industry, manufacturing enterprises shall take the initiative to explore changes in users' psychological needs, cater to changes in users' psychological needs, and become industry leaders; have keen insight, and on the basis of meeting existing needs, explore users' deep psychological needs, and then adapt to market development requirements through service innovation, consolidate and strengthen their market competitiveness, and achieve sustainable development.

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SOCIAL PSYCHOLOGICAL ANALYSIS OF ROLE AND BEHAVIOR CHARACTERISTICS OF CONTEMPORARY UNIVERSITY TEACHERS

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Background: Society is like a broad stage. Everyone plays a certain role on this stage, with role norms and role behaviors associated with their social status, and each social role has a set of specific psychological and behavioral manifestations.

Objective: As a contemporary university teacher, its role is complex and diverse, with its own unique role norms and role behavior. It is of great significance to fully understand the characteristics of the roles played by university teachers and the psychological qualities and skills of these roles for the improvement of teachers' self-quality, the perfection of their character, and the coincidence of their psychology and behavior with their roles, so as to better fulfill the mission entrusted by society and fulfill the sacred duties of university teachers in the new era. Extensive knowledge is the foundation for people to make achievements in any profession. Under the background of knowledge and information, teachers should strive to learn science and culture, and be good at mastering career related knowledge and information. Education is a lofty cause of mankind, and the bearer of this cause is the teacher. Teachers transmit human cultural and scientific knowledge, carry out ideological and moral education, and cultivate new generation after generation. The historical mission of teachers is glorious and arduous. People use "hundred years old" to express the profound significance of teachers' work, and to express their reverence for teachers by "hard gardeners" and "engineers of human soul". The hope of rejuvenating the nation lies in education and the hope of education lies in teachers. Teachers are the basis of national hope, and they shoulder the important task of cultivating the builders and successors of socialist modernization. And university teachers play a special social role with their specific historical tasks and constitute their special social status. Therefore, in the process of teaching, university teachers should master relevant theoretical knowledge and skills He became a learned and well-informed scholar.

Subjects and methods: This paper uses the methods of literature research and observation to analyze the role characteristics and behavior characteristics of contemporary university teachers in order to provide reference for related research. Teachers are a noble social profession and shoulder the responsibility of training talents. The role of teachers refers to the behavior mode that is determined by the social status of teachers and expected by the society. That is, the role of teachers represents the status and identity of teachers in social groups, and contains many behavioral patterns that the individual teachers should perform. First, the role of preacher. Teachers have the mission of transmitting the traditional social morality and orthodox values, and "the way exists, the teacher also exists". After entering the modern society, although the moral and values have diversified characteristics, the moral and values of schools and teachers always represent the moral and values in the dominant position of society and guide the young students with this concept. Second, the role of the demagogue. Teachers are the trainers of talents in all walks of life. They carefully process and organize the talents on the basis of mastering the knowledge experience and skills acquired by human beings through long-term social practice and help them master the knowledge accumulated by human beings for hundreds and thousands of years in a short time and form their