

Exploration on the Integration and Development of Psychology and Science Education in Universities

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Abstract: From the rich results generated by the combination of psychology and education in universities, it can be seen that the experimental education school that emerged in Europe and the United States in the late 19th century was a purely empirical spirit influenced experimental behavior in education and teaching; He pioneered a scientific educational experimental model, which is a milestone in the development history of education. It first introduces scientific experimental models into educational experiments through psychology, thereby promoting the development of educational experiments towards a scientific and standardized direction. This educational experiment of positivism paradigm, which evolved from the experimental research of psychology, is also the research paradigm advocated by psychological education in colleges and universities after the combination of college psychology and scientific education.

Keywords: Educational Experiments; College Psychology; Teaching

Introduction

Swiss psychologist Piaget proposed a cognitive approach that provides a good reference for breaking away from the traditional "scientific" and "experiential" ways of thinking. Piaget reconsidered structuralism from the perspective of evolution, and formed a new epistemology system on this basis. The "Clinical Trial Teaching Method" he pioneered has opened up new ideas and perspectives for experimental teaching in education. Bruner proposed the "cognitive discovery" learning theory, Bloom proposed the "proficiency learning" theory, and Ausubel proposed the "meaningful language learning" theory. At present, the latest development of western educational experiment methodology shows a combination of previous empiricism and science, forming a modern structuralism methodology that integrates integrity and analysis. Under the requirements of research, the scale method, experimental method, statistical method, survey method in education, literature method, and historical research method in psychology are all applicable to psychology and education in universities.

1. Domestic and international research

Now, we are facing a new era of social transformation, namely the rapid transformation from a traditional society to a modern society. Social development provides opportunities for mental health education, economic development provides conditions for mental health education, and technological development provides fresh educational content, advanced educational methods, and scientific research paradigms for mental health education. All these changes provide greater possibilities for the cross integration of psychology and science education research.

Taking "The Objectives and Main Content of Adolescent Psychological Science Education" as an example, American researchers propose that adolescent mental health education should be further integrated with school education, with the goal of cultivating

students' good developmental functions in real life, focusing on the development of social adaptability for all young people rather than the symptoms of individual students' psychological and behavioral problems; A project in the UK aims to promote students' positive behavior and emotional well-being, and focuses on cultivating students' self-awareness, self-control, empathy, social skills and stimulating students' learning motivation, which has achieved good educational results; The mental health department of the Italian National Institutes of Health has initiated a study aimed at improving students' psychological well-being, which mainly includes cultivating adolescent problem-solving and communication skills.

In addition to cultivating attitudes and abilities related to mental health within individuals, a Finnish study also attempted to improve students' mental health levels through the improvement of the campus ecosystem. The risk behaviors of adolescents, such as alcohol abuse, drug abuse, and drunk driving, are significantly related to their psychological and behavioral problems. Studies from Australia, the United States, and Finland have shown that strengthening the connection between adolescents and schools, establishing supportive teacher-student relationships, can effectively reduce the probability of risky behavior among them, and can improve their learning motivation, academic achievement, and mental health level; Australian researchers advocate reducing the risk of psychological and behavioral problems among adolescents by cultivating their psychological resilience, and have conducted empirical research on this topic. Recently, the National Academy of Sciences, the National Academy of Engineering, the National Academy of Medicine, and the National Council for Scientific Research in the United States jointly released a report, clearly stating that educational research can and should learn from natural science research methods and norms.

Therefore, we need to re-understand the research object, re-examine the original research paradigm, and reposition our research thinking. It is undeniable that there are many problems in current educational research, such as valuing knowledge over ability, valuing intellectual education over moral education, and valuing results over processes. The essence of the problem lies in the fact that researchers rely on their existing experience and their own experiences to interpret research paradigms, lacking scientificity, pertinence, and universality, and their research on the problem remains superficial; Psychology lacks support for education, and educational research results lack objectivity and effectiveness; Breakthrough progress has not yet been made in basic scientific issues, leading to applied research crossing the river by feeling the stones. In addition, the ability and methods of educational research are also a "bottleneck", mainly manifested in the clear division between social sciences and natural sciences, the clear boundary between psychology and education, and the insufficient cross integration. People are always accustomed to conducting educational research from the macro perspective of social sciences, forming a research methodology system mainly based on empirical paradigms, emphasizing speculation over empirical evidence, and natural sciences also have a tendency to "see only trees but not forests".

2. Main problems in scientific teaching of psychology courses in universities

2.1 The teaching system of psychology courses in universities is not mature enough

The survival mode of university psychology can be divided into two types: one is the teaching method that combines university psychology with university education. Secondly, conduct theoretical teaching of psychology based on the actual situation of the school and the school. These two opposing ways of existence have brought about many problems, resulting in the "popularization" of the teaching content and teaching content of university psychology courses, causing many schools to mainly "copy and apply" the teaching of psychology courses, thus making it difficult for course teaching to have its own characteristics. Therefore, these two ideas are difficult to match with the development of university psychological education, and also difficult to match with the current needs of quality education reform and development. This requires establishing a more systematic curriculum system in the teaching of psychology in universities and gradually increasing the proportion of psychology subjects. Re combine and integrate the contents of educational psychology and other aspects, actively acquire new knowledge and new contents, and thus promote the scientific teaching level of college psychology courses.

2.2 Overemphasizing theoretical knowledge while neglecting practice

Currently, in universities, psychology courses mainly appear as elective courses, which shows that it is also widely popularized and accepted by people in universities. However, for universities, the curriculum of psychology related courses is relatively short in

duration and lacks teaching experience, making it difficult to improve students' overall quality. When teaching, most of them focus on explaining and explaining theories, which greatly affects the improvement of students' practical abilities and makes it difficult to correctly guide them in applying relevant psychological theoretical knowledge. In addition, in universities, it is difficult to match psychology with the teaching content of other disciplines, and it is even more difficult to combine it with factors such as one's own career planning and employment choices. Therefore, it is difficult for students to have a sufficient understanding of themselves, and it is also difficult to combine practical and psychological knowledge, only staying at the theoretical level.

3. Main methods for promoting the diversified development of scientific education in psychology courses in universities

3.1 Building a Diversified Psychology Teaching Platform

The teaching focus of different universities on courses will also exhibit different characteristics. Firstly, during the development of psychology courses, the selection of educational content should be in line with the actual situation of the school, and a strong psychology professional teaching platform should be constructed during the development process; Secondly, increase corresponding financial investment, select appropriate venues, and build good psychological counseling rooms, so that students can find an important place to help themselves with psychological counseling at school and receive effective psychological guidance. In addition, corresponding psychological survey questionnaires can also be developed to coordinate various branches of the school, timely understand the psychological states exhibited by students, and make targeted adjustments to the psychological curriculum in response to the current reality, in order to reasonably guide and optimize students' negative psychology, and promote their growth in a healthier environment.

3.2 Improving the Teaching Structure of Psychology Courses

Psychology is a multi-dimensional, comprehensive, multi-level, and complex discipline. However, due to the short duration of psychological course teaching and the inadequate educational structure, universities should continuously improve such a course structure to promote its effective development. According to the theme of education, it can be divided into three different aspects: society, family, and school. And based on the vertical hierarchical characteristics of these three, targeted psychological education should be carried out for students; According to its horizontal service scope, it is also divided into three different aspects: pre employment, job transfer, and on job. No matter how to stratify and integrate the content and model of educational psychology, the most important thing is to closely coordinate psychology and teaching, further promote the construction of the discipline, and effectively integrate with social services, so as to promote the popularity of psychology courses in the teaching of various courses in colleges and universities.

4. Conclusion

Constructing a research approach that focuses on people as the basic object of study, with human development as the core, guided by real-life educational issues, and using psychological research methods, firmly standing on the standpoint of scientific education, continuously strengthening the organic integration of psychology and scientific education research paradigms, and developing interdisciplinary and integrated research, is the new approach and paradigm of psychological health education research in the new era. Obviously, there is a long way to go to improve the scientificity of research methods, the completeness of research procedures, the standardization of research results, the reliability of research conclusions, and the universality of research results in psychology and science education.

References

- [1] Fu J, Zhao F. Practical Research on the Training Objectives of Applied Talents in Environmental Psychology Courses [J]. Education and Teaching Forum, 2019 (45).
- [2] Huang XY. Discussion on the Reform of Psychology Curriculum in Modern Universities [J]. Curriculum Education Research, 2017 (20).
- [3] Huang S. Reflections on the Reform of Psychology Curriculum in Normal Universities under the Cultivation of Excellent Teachers [J]. Journal of Qiqihar Normal College, 2017 (04).

[4] Zeng LP. Preliminary Exploration of Strategies to Enhance the Teaching Attraction of Psychology Courses for College Students [J]. Education Observation (First Half Month), 2017 (09).

[5] He L. The role of personality tests in learning personality psychology courses [J]. Western Quality Education, 2016 (02).