

Quantitative Evaluation Method of Psychological Quality of College Teachers Based on Fuzzy Logic

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ABSTRACT

Based on the fuzzy method, this paper establishes a ranking model of the psychological quality of college teachers and an interception model of assessment indicators. On this basis, a quantitative evaluation method of college teachers' psychological quality is proposed by using the principles of fuzzy psychological evaluation and fuzzy recognition. According to empirical study, this evaluation approach is capable of providing a theoretical foundation for the next teacher training as well as a thorough assessment of the psychological qualities of teachers. The research concludes by pointing out that the model and evaluation approach can also be used to introduce and train university teachers, and it makes some sound recommendations for their development. An empirical study on the quantitative evaluation method of college teachers' psychological quality based on fuzzy psychological evaluation and fuzzy recognition principle is beneficial to better build the foundation of college teachers' psychological quality under the concept of harmonious education.

KEYWORDS

Conformity Psychology, Harmonious Ecological Education, Index Interception, Model, Psychological Quality, Set Pair Analysis

INTRODUCTION

Since American clinical psychologist Freudenberger introduced the idea of “psychology under the concept of harmonious ecological education” when he researched occupational stress in the 1970s, the field of teachers has gradually benefited from the research on psychology under the concept of harmonious ecological education). Under the idea of harmonious ecological education, teachers are frequently under strain at work and are vulnerable to psychological disturbances due to the uniqueness of their teaching materials and other factors (Skidmore, 2016). The National Education Association of the United States once reported that 20% of college teachers needed extra attention from psychologists, 30% of them had social maladjustment, 37.5% of them frequently felt extremely worried about their work efficiency, and another 30% found it difficult to get along with other people.

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The School of Public Administration at Renmin University of China, the Institute of Human Resources, and the Sina Education Channel jointly conducted the “Survey on Occupational Stress and Mental Health of Chinese Teachers” in 2005, and the results revealed that 86% of the teachers had a mild sense of psychology under the concept of harmonious ecological education (Data from The National Education Association of the United States). Another 34.6% of teachers reported that the pressure was very high, 47.6% reported that the pressure was relatively high, and 38.54% felt psychologically stressed; of them, 58.5% had a moderate psychology under the concept of harmonious ecological education, and 29% had a serious psychology; and 64.4% of people with poor health reported feeling unsatisfied at work (Ma et al., 2020). Numerous subsequent investigations have demonstrated that elementary and secondary school teachers exhibit emotional weariness and noticeable psychological disturbances under the notion of harmonious ecological education (Falla-Falcón et al., 2022). The American scholar Dworkin once said, “No matter what consequences the psychology of teachers under the concept of harmonious ecological education has on teachers and school organizations, the students of these teachers are the ultimate victims” (Wang et al., 2021). The development of a whole, harmonious educational ecosystem is related to the psychological well-being of college instructors. The survival and mental health of teachers are intimately correlated with their professional development and the educational reform in the educational ecosystem. The harmony of the entire educational ecosystem is somewhat related to the adjustment of college teachers’ self-development and mental health. Establishing the “overall connection” and “dynamic balance” in a harmonious educational environment between one’s own development and other system components is the main objective of college teachers’ mental health.

The terms “ecological harmony” in education refer to the transplantation and borrowing of the terms “ecological balance” and “ecological harmony” in the field of education. Ecological harmony emphasizes the kinship, openness, interaction, and creativity of the educational mechanism. It emphasizes the harmonic matching and organic unity between the subject and object of education and the internal and exterior environment. The educational idea of “ecological harmony” complements and broadens many other existing advanced educational ideas while also being consistent with the current state of education in the country. Researchers from various nations have conducted empirical research to investigate the causes or influencing variables of teachers’ psychology under the idea of harmonious ecological education in order to alleviate teachers’ psychological quality assessment under the concept of harmonious ecological education (Deng, 2022). The early stages of linked study on psychology and other aspects under the notion of teachers’ harmonious ecological education primarily focused on external factors such as teachers’ work pressure and social support. With the re-examination of teachers’ roles in the context of the development of postmodern teachers’ harmonious ecological education, the major issue of the teachers’ job burnout study has switched from external to internal aspects of teachers. Teachers’ cognition, belief, and evaluation models will influence their classroom thinking and conduct. As a result, it is critical to investigate how teachers’ beliefs, cognition, and evaluation process affect teachers’ emotional response to stressors that induce job burnout, which is related to teachers’ resilience. Much research has verified teacher resilience as a significant internal psychological resource of teachers, and it is an important metric to intervene and alleviate teacher burnout.

At the moment, most study on the psychology and resilience of teachers under the notion of harmonious ecological education is focused on preschool teachers. Simultaneously, there are extremely few teachers with various professional credentials as research objects (Bagadaeva et al., 2021). Most of the research discusses teachers with different professional titles as demographic variables, which are juxtaposed with teaching age and gender. There are also a small number of studies on teachers with different professional and harmonious ecological education development stages as research. The object is to study the psychological resilience of teachers or the psychology under the concept of harmonious ecological education (Wang et al., 2021). The concept of resilience stems from the attention paid by psychiatry and developmental psychology to children’s personal character and

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