Research Article

Design and Application of Mobile Education Information System Based on Psychological Education

Chun-Hung Ko and Yucheng Shen
College of Education and Science, Huaiyin Normal University, Huaiian 223300, Jiangsu, China

Correspondence should be addressed to Yucheng Shen; 20180008@wzu.edu.cn

Received 13 August 2021; Revised 27 November 2021; Accepted 6 December 2021; Published 31 December 2021

Academic Editor: Sang-Bing Tsai

Copyright © 2021 Chun-Hung Ko and Yucheng Shen. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

With the continuous development of society, the pressure of human beings is increasing, and the problem of psychological counseling for school students is getting more and more serious, which has brought great challenges to the education and management of school students. Universities should cultivate students’ professional ability on knowledge and practical skills; we should pay more attention to their psychological counseling and develop and design a simple and efficient learning environment. It is very necessary to establish a psychological evaluation system for college students. This article is based on the design and application of the mobile education information system for psychological education. It highlights that the current psychological counseling problems in school education are indispensable. To better manage the psychological counseling problems faced by many students, 67% of the students have many psychological problems, and the mental health of students in school education and psychological counseling have become the common concern and urgent problems of all college managers. This paper uses the methods of literature research, behavior interview, and experimental investigation to investigate the complementary relationship between the connotation of education and psychological counseling from the data of the fuzzy integral model of psychological counseling, so as to pay more attention to the students’ mental health problems and make the students grow up healthily. The experimental results of this article show that there is still a lot of room for improvement in the use of mobile education information systems to improve their ability to carry out psychological counseling work.

1. Introduction

Today, with the rapid development of economy, the rapid development of science and technology, and the complex and changeable relationship between people, the pace of life of the whole society is faster and faster, and people are carrying more and more pressure. However, the students who are usually between 18 and 25 years old have not fully formed their own consciousness and psychological contradiction between ideal and reality. They are a relatively specific social group. They also have many unique problems, such as difficulty to adapt to the new environment and more conflicts between people, emotional fluctuations, relatively immature personality, and other psychological problems. How can we help those students who do not understand the world to avoid or eliminate the psychological crisis caused by the pressure of study, friendship, and work, prevent the occurrence of psychosomatic diseases, face various psychological problems in a good psychological state, and then adapt to the complex social environment? Students’ psychological counseling has become a common concern and urgent problem for school administrators.

First of all, from the academic level, it sorts out the close relationship between psychological education and school psychological education, accurately locates the current psychological guidance role of school educators, promotes a comprehensive thinking on the effectiveness of school and school psychological education, and advances the perspective of German education, the development of psychological education work. If they are qualified to undertake the tasks and missions of “psychological education,” they should ask “what kind of psychology should they have for counseling ability?” Make scientific analysis and detailed theoretical explanation.
The educational tasks and responsibilities are carried by the current school education. Wortmeyer and Branco believe that, in the daily training of students, university education is the key, psychological counseling education is the foundation, safety education is the key, and legal education is the most important. In the era of population big data, we must find the right way. Through new media, higher education, and other channels, extensive and effective use of network group consultation is a new way of education, bringing psychological counseling education into the scope and seeking high-quality education, but the result is not very accurate [1]. In order to understand the general situation of learning anxiety and depression of middle school students, this paper analyzes the characteristics of learning anxiety and depression of middle school students and its relationship with academic achievement and psychological counseling. The students were divided into excellent group, passing group, and failure group. After two months of psychological counseling and psychological counseling, the students with anxiety and depression were re-evaluated. The mild and severe anxiety and depression of the pass group and the failure group were significantly higher than those of excellent group and good group. Before and after psychological counseling, the scores of depression and anxiety tests decreased significantly and improved significantly, and it is easy to encounter many key points and complexities in the process, but there is still a lack of specific data [2]. Peng et al. think that school education will gradually take psychological consultation and humanistic care as important teaching contents and discuss the innovative ways of humanistic care and psychological consultation in school education in the new era. Combined with school education and management, it focuses on individual heart-to-heart discussion and group therapy. The whole process is carried out simultaneously, using traditional and modern teaching methods, providing communication opportunities for college students through psychological counseling and other services, forming the trigger, slow release, intervention, and early warning mechanism of psychological crisis, and improving the ventilation early warning mechanism of college students, but it is lack of development direction [3].

The innovation of this article lies in the design of the mobile education information system based on psychological education through the data survey of the fuzzy integral model of psychological counseling and the experimental investigation method, the study of the connotation of education and psychological counseling, and the impact of mental health on the life, learning, growth, and success of students. It has an important impact [4, 5]. With the rapid economic and social development and the intensification of social competition, students are faced with new situations and new problems, so as to solve their psychological confusion and even mental health problems [6, 7].

2. Connotation and Methods of Education and Psychological Guidance

2.1. Status Abroad. In China, psychological counseling first rose in Taiwan in the 1960s. In mainland China, psychological counseling began in the 1980s and developed in the 1990s. Especially with the CPC Central Committee’s release of several documents emphasizing that psychological counseling education should be brought into the vision of several documents emphasizing that psychological counseling education should be brought into the vision of several documents emphasizing that psychological counseling education should be brought into the vision of moral education, the theoretical and practical research of psychological counseling has been widely carried out. Research on the combination of psychological counseling and moral education and research on the training of psychological counseling in cooperation with moral educators mainly come from the research value of strengthening moral education through psychological counseling, the mutual influence between Ma Jianqing and other researchers, and the publication number of several articles after that. Psychological counseling has gradually flourished, which is called school psychological counseling or school psychology abroad [8, 9]. In recent years, the psychological counseling theory has been updated and developed rapidly. From the perspective of development, the original emphasis on “research” and the light on “practical application” to the current practice and theoretical research are equally emphasized. This study will sort out the more advanced concepts and development trends of psychological counseling in developed countries, with a view to providing reference for the localization development of psychological counseling education in China [10, 11], as shown in Figure 1, which combines psychological counseling with school education.

2.2. Connotation of Education and Psychological Counseling. The scope of educational psychological counseling is all students, and the focus is to help students deal with developmental problems and promote their personal growth [12, 13]. "School psychological counseling educators' psychological counseling ability" refers to the ability of psychological counseling educators to guide and deal with college students’ ideological and psychological problems in the growth and development stage based on the moral education goal of promoting students’ all-round and healthy development, rather than “psychotherapy” or "psychological counseling" in the ordinary sense. “School psychological counseling educators’ psychological counseling ability” has the following characteristics: first is independence, as "psychological education,” and moral, intellectual, physical, aesthetic, and labor together constitute the educational ability, which is relatively independent; second is hidden and implicit; school psychological counseling educators' awareness of psychological counseling knowledge and their own or others’ psychological status is difficult; what we know must be reflected through activities, practice, training, etc., and also be improved and perfected through this process; thirdly, permeability has integrated the content and requirements of psychological counseling ability in various abilities of school educators to varying degrees [14, 15]. Therefore, this paper defines the "structure of psychological counseling ability” as the composition of psychological counseling ability that psychological counseling educators should have in order to participate in school psychological counseling work [16, 17], as shown in Figure 2.
2.3. Education and Psychological Counseling Methods

2.3.1. Literature Research Methods. In order to achieve the purpose of the research, the author consulted a large number of books, journals, papers, reports, and national journals related to the subject. It mainly discusses Marx’s exposition on the all-round development of human beings, school psychological counseling education, moral education, and heart. This paper reviews the literature on the relationship between psychological counseling and positive psychology, which provides an important theoretical basis for achieving the research purpose bedding [18, 19].

2.3.2. Behavioral Event Interview. In this study, the behavior event interview method is used to go deep into the work situation of school psychological counseling educators, to understand their influence on them. In order to draw up the corresponding questionnaire and obtain the hidden and detailed information of the research objects, this paper analyzes the ideas and practices of psychological counseling. Micro and personalized information provides a realistic basis [20].

2.3.3. Questionnaire Survey Method. This study also uses a self-made questionnaire tool to conduct a sample survey of the school psychological counseling education team and analyzes the educational phenomenon; the purpose of this study is to make a thorough, comprehensive, and systematic understanding in order to accurately construct the psychological counseling ability of school psychological counseling educators’ construction model.

3. Design Experiment of Mobile Education Information System Based on Psychological Education

3.1. Fuzzy Integral Model of Psychological Counseling. There are many factors that affect psychological counseling. Traditional psychological counseling evaluation is that each
factor plays an independent role, which may be meaningful for patients with mental disorders; we can evaluate the severity of specific psychological symptoms by evaluating specific factors, but as far as the psychological problems other than mental illness are concerned, individual factors may not have clinical significance in the evaluation. Only the comprehensive evaluation of each factor can accurately judge the severity of the problem and provide more accurate information for psychological counseling staff. It is difficult to use a common score accumulation to calculate the inconsistency of the scoring standards of the two factors and the difference of the roles of each factor in mental health. Therefore, this study applies fuzzy integral in fuzzy mathematics to the establishment of the comprehensive processing model, trying to provide new ideas and more scientific methods for psychological evaluation.

3.2. Mathematical Expression of Fuzzy Integral. Consider any object in the universe, and give a value to every nonfuzzy subset \( f \in H \) \( r(F) \in [0, 1] \). It indicates the fuzziness degree of the sentence "\( R \) belongs to \( f \)" that is, the subjective belief degree or possibility of a guess. Normality of fuzzy measures if and only if the fiber satisfies the following properties:

\[
\begin{align*}
    r(\varnothing) &= 0, & \text{if } F = \varnothing, \\
    r(F) &= 1, & \text{if } F = H. \\
\end{align*}
\] (1)

The evaluation of psychological counseling is often that each factor plays an independent role. This evaluation method may be meaningful for patients with mental disorders, and the severity can be judged by the evaluation of a certain factor. However, for the psychological problems that do not reach the mental disorders, the single factor may not have significance in the evaluation, showing its monotony:

\[
r(H) \leq r(A) \quad \text{if } H \subset A.
\] (2)

Set up \((y, F(y))\) is a measurable space and \(P(y)\) is the power set of \(Y\), such as \(f(y) = 2^Y\). The fuzzy integral of \(Y\) is expressed as

\[
\int_y s(y)dr(\bullet) = [a \land r(H \cap R)].
\] (3)

\((y, F(X))\) is a measurable space if \(H, A \in F(X)\) and \(H \cap A = \varnothing\). In addition, the following conditions are met:

\[
r(H \cup A) = r(H) + r(A) + \lambda_1 r(H)r(A).
\] (4)

3.3. Mental Health Scale. Mental health assessment usually uses an independent questionnaire composed of 32 aspects (factors), including three points. At this point, the students who participated in the questionnaire survey answered within a certain period of time. Each factor has a score corresponding to this aspect of mental health. The score of each factor has an equal range to evaluate the mental health level here. The questionnaire included somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobia, paranoia, and psychosis. The psychological problems faced by students are shown in Table 1:

The multiplication of the scale is divided into five levels: 0 means “no,” 1 means “very light,” 2 means “medium,” 3 means “heavy,” and 4 means “serious.” If the average coefficient is less than 3, the result is asymptomatic or mild. If the average value of the coefficient is greater than 3, the symptoms are more serious.

3.4. System Test

3.4.1. Test Environment, Objects, and Results. The author sets up a small simulation test environment composed of 1 teacher computer (server) and 36 student computers (client) in the computer room of the Engineering Management Department of a college. The configuration environment of the server is Windows Server 2003 + IIS 6.0 + ASP + Access.

With the cooperation of the teachers of the Mental Health Education Center and the teachers of the computer room, the author organized the 2018-level information management major of the Engineering Management Department of the college to participate in the system test. Test results: the teachers and students participating in the test mainly tested the function and stability of the system. Judging from the test results, whether it is for users to post information or conduct online communication, all functions can be implemented correctly and run normally. Teachers and students participating in the test generally report that although the system is not as powerful as some professional mental health software, it is relatively simple in operation and can basically meet the needs. It can also establish network mental health files for college students, which greatly reduces the workload of educators. Improve work efficiency, and stimulate students’ enthusiasm for participating in mental health education. However, the system still has some imperfections, such as the intelligence of the system and the aesthetics of the system’s interface, which need to be further improved and optimized. Since the system is based on the network environment, it should also pay attention to issues such as network security, so it is necessary to further improve and perfect the system to enhance the reliability and robustness of the system.

4. Connotation and Analysis Frame of Education and Psychological Counseling

4.1. Data Analysis of Experimental Investigation. After sorting out and summing up the ability words filled in by psychological teachers, psychological assistants, and school psychological counseling education, 32 ability words are counted, and the ability words in the front are shown in Table 2. Among them, more than half of the respondents believe that listening ability, observation ability, communication ability, empathy ability, and mastery of professional knowledge are very important for school psychological counseling education to carry out psychological help work. The results are basically consistent with the content of psychological counseling ability proposed by scholars in the
existing literature. In addition, patience, responsibility, and active enthusiasm occupy a certain proportion in the vocabulary of ability, but the three tend to focus on personal traits rather than personal abilities. Therefore, no consideration is given to the structural assumption of incorporating them into psychological counseling ability. The findings are shown in Figure 3:

As can be seen from Figure 1, theoretically speaking, the domestic research on school psychological counseling education mainly focuses on theoretical discussion, and the research results are lack of scientific demonstration and operability, especially the research on school psychological counseling education and psychological counseling ability is still blank. This research is a supplement and promotion to the research in the field of school psychological counseling education. The level of peer counseling ability restricts the effectiveness of school psychological counseling education to a certain extent. Further clarifying the key ability elements of peer counseling in school psychological counseling education through structural exploration can provide theoretical guarantee for the scientific and standardized development of school psychological counseling education system, as shown in Figure 4.

4.2. Chart Design of Psychological Counseling Analysis Box. The daily system and mechanism are relatively perfect. The school mental health counseling center can only have an operation and management mechanism in terms of the system and mechanism. The total number of actual participation of various departments is 521. In daily work, they can work in accordance with the normal central management mechanism and have a relatively complete publicity work system and process; they also have strict system management for consulting and crisis intervention, including consulting registration and service file management systems. The Mental Health Counseling Center has done a lot of work in general and has also worked very hard on the promotion of schools. There is an independent office space, and there are enough function rooms, and there are corresponding equipment in the function rooms to meet the daily consulting work. In the work of the center, there are also regular weekly activities, and good results have been achieved. It has also achieved certain results in guiding the work of surrounding primary and secondary schools, and training for school psychology teachers has also been carried out. In addition, the development of special activities is slightly insufficient, and more novel and distinctive activities can be added in future activities, as shown in Table 2:

It can be seen from Table 2 that there are many ways of psychological counseling in the big social environment, but it has not really entered every community at present. This is the direction that the national school education counseling center needs to work hard in the future, especially to realize the Trinity network construction. Finally, there are only two teachers in the counseling center who are responsible for the work of the whole county. The work intensity is also very high, which can easily lead to the increase of teachers' work pressure and affect the development of mental health education. Therefore, the school can use the time of class meeting, mental health class, or special preservice training courses to carry out the group counseling of school psychological preparation. If there are not enough teachers, it can also take the form of helping and guiding that is first train the class "psychological committee members," and then, let them train other students.
5. Conclusions

This paper analyzes the connotation of education and psychological counseling and the importance of the analysis frame. Through the experimental investigation method and the fuzzy integral model method of psychological counseling, it highlights that the "psychological counseling ability training path" refers to the way that the school psychological counseling educators rely on to improve the psychological counseling ability based on the moral education goal of promoting the comprehensive and healthy development of students. Under the policy requirement of strengthening humanistic care and psychological counseling to achieve the mission of "moral and mental education," this study, from the perspective of the construction of psychological counseling education team in colleges and universities, obtains the psychological counseling ability factors of current psychological counseling educators in colleges and universities by means of behavior event interview and questionnaire survey and puts forward some suggestions. The actual structure of psychological counseling ability in counseling education puts forward many suggestions for the next step of constructing the training path of psychological counseling ability, which provides an important practical guidance basis for scientifically improving the work level of psychological counseling educators in colleges and universities and also urges the psychological counseling educators in colleges and universities to integrate psychological health education into moral education, so as to activate the psychological counseling education in colleges and universities. Endogenous motivation promotes the return of psychological counseling education to the value of "taking people as basis and helping others become talents." Based on a large number of theoretical investigation and statistical analysis, this paper has not only theoretical significance but also practical significance.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

References

[1] D. S. Wortmeyer and A. U. Branco, "Institutional guidance of affective bonding: moral values development in Brazilian military education," *Integrative Psychological and Behavioral Science*, vol. 50, no. 3, pp. 447–469, 2016.

[2] C. Li, "Exploration of the ideological and political education based on group psychological tutor—take Shanghai University as an example," *Journal of Guangdong Water Resources and Electric Power Vocational and Technical College*, vol. 14, no. 1, pp. 45–48, 2016.

[3] H. Peng, P. F. Liang, A. Wang, and L. Q. Yue, "Influences of different rehabilitative methods on function of hands and psychological anxiety of patients with deeply burned hands retaining denatured dermis and grafting large autologous skin," *Zhonghua Shaozhang Zazhi*, vol. 33, no. 5, pp. 272–276, 2017.
[4] L. Kong, “The relationship between anxiety, depression and academic record: based on the study of N middle school,” International Journal of Social Science and Education Research, vol. 3, no. 5, pp. 9–15, 2020.
[5] Y. Wang, H. Ran, and J. Feng, “FPGA based hardware experiment Box:Digital/Analog/Circuit Analysis experience box,” Value Engineering, vol. 35, no. 8, pp. 154–156, 2016.
[6] S.-J. Kang, “Analysis box office success of a movie—focused on commercial film released in 2016,” Journal of the Korea Entertainment Industry Association, vol. 11, no. 5, pp. 1–15, 2017.
[7] M. Billes, A. Møller, and M. Pradel, “Systematic black-box analysis of collaborative web applications,” ACM Sigplan Notices, vol. 52, no. 6, pp. 171–184, 2017.
[8] B. Utomo, M. Hatta, S. Pratiwi, and M. Nasrum, “Analysis of forkhead box protein-3 (Foxp3) in allergic rhinitis patients,” International Journal of Otolaryngology and Head & Neck Surgery, vol. 07, no. 4, pp. 228–236, 2018.
[9] L. Zhang, “Optimization and structural analysis of box frame by through connection,” Special Purpose Vehicle, no. 8, pp. 94–97, 2018.
[10] Y. Kim, M. Kang, and S. R. Jeong, “Text mining and sentiment analysis for predicting box office success,” KSII Transactions on Internet and Information Systems, vol. 12, no. 8, pp. 4090–4102, 2018.
[11] R. Jin, “Humanistic care and psychological counseling for ideological and political education in colleges and universities,” Journal of Chifeng University (Philosophy and Social Sciences Edition), vol. 40, no. 6, pp. 136–138, 2019.
[12] R. Kong and Q. Niu, “Effect of group psychological counseling on improving the quality of College Students’ love off air,” Journal of Social Sciences of Shanxi University, vol. 31, no. 4, pp. 79–82, 2019.
[13] L. Zhou, “Analysis on the influence of group psychological counseling in dormitory on the relationship of college students’ dormitory,” Journal of Xingyi Normal University for Nationalities, no. 2, pp. 59–63, 2019.
[14] Y. Zhang, “A study on readers’ complaint communication based on psychological counseling technology,” Journal of Quanzhou Normal University, vol. 36, no. 4, pp. 55–59, 2018.
[15] L. Zhu, Z. Wan, and Y. Wen, “Effect of group psychological counseling on alexithymia, depression and anxiety among patients with hemodialysis,” Shanghai Nursing, vol. 18, no. 8, pp. 23–26, 2018.
[16] K. Rojkova, E. Volle, M. Urbanski, F. Humbert, F. Dell’Acqua, and M. Thiebaut de Schotten, “Atlassing the frontal lobe connections and their variability due to age and education: a spherical deconvolution tractography study,” Brain Structure and Function, vol. 221, no. 3, pp. 1–16, 2016.
[17] M. Welch, “Education pays 2016: the benefits of higher education for individuals and society. Trends in higher education series,” College Board, vol. 4, no. 4, pp. 143–156, 2016.
[18] The NAMS 2017 Hormone Therapy Position Statement Advisory Panel, “Hormone therapy position statement of the North American Menopause Society,” Menopause-The Journal of the North American Menopause Society, vol. 25, no. 11, pp. 1362–1387, 2018.
[19] D. Brian and Haig, “Statistical methods in education and psychology: a critical perspective,” Australian Journal of Education, vol. 40, no. 2, pp. 190–209, 2016.
[20] G. Munten, “Interprofessional education: effects on professional practice and healthcare outcomes (update1),” Nederlands Tijdschrift Voor Evidence Based Practice, vol. 14, no. 1, pp. 14–15, 2016.