Hindawi
New Directions for Child and Adolescent Development
Volume 2023, Article ID 9374037, 15 pages
https://doi.org/10.1155/2023/9374037

Research Article

Evaluation of the Effect of Mental Health Education on Improving Adolescents' Social Adaptability

Yuping Li

School of Literature, Journalism and Communication, Zhengzhou Business University, Zhengzhou, Henan 451200, China

Correspondence should be addressed to Yuping Li; li6655ping@163.com

Received 23 March 2023; Revised 12 September 2023; Accepted 20 September 2023; Published 30 September 2023

Academic Editor: Diego Gomez-Baya

Adolescence is the preparatory stage for young people to enter the society. Although teenagers are good at catering to the development trend of society, they are limited by age, growth environment, and other factors, and their cognition of society is too simple, resulting in poor social adaptability. This paper adopts control method and questionnaire survey to study the effect of mental health education on improving social adaptability of teenagers. A total of 712 adolescents from two schools in Beijing were selected for the study ($M = 15.76$, $SD = 2.338$). In addition, the age, gender, family environment, and growth environment of the youth were taken as the independent variables. The results showed that the social adaptability of adolescents and its subdimensions were significantly affected by age, family environment, and growth environment ($p < 0.05$), while gender had little effect on the overall social adaptability of adolescents ($p > 0.05$). After receiving mental health education, adolescents' social adaptability has significantly improved, with statistical differences in self-adjustment ability, interpersonal adaptability, behavioral adaptability, and environmental adaptability as well as in all dimensions ($p < 0.01$), indicating that mental health education has obvious and comprehensive improvement effect on adolescents' social adaptability. The social adaptability of adolescents is also affected by their own characteristics and growth background, which will further affect the effect of mental health education on the improvement of the social adaptability of adolescents. Based on these findings, this study provides significant insights for parents and teachers to improve the social adaptability of adolescents from the angle of mental health. Meanwhile, parents and teachers should specially pay attention to the influence of personality and growth background of adolescents which also play a decisive role on the effect of mental health education. This study provides practical and useful recommendations for improving adolescent social adaptability and adds to the theory for corresponding future research.

1. Introduction

1.1. Social Adaptability. Adolescence is an important stage for people to transition from a relatively stable family environment and campus environment to a complex and changeable social environment [1]. In this stage, teenagers need to learn and master some social skills. However, the development speed of modern society is particularly fast, such as high-tech industry technology; its update speed even exceeds the speed of ordinary people to learn and master it, like the promotion of 4G technology was only more than ten years; then, 5G technology emerged, and even 6G technology has been put into research [2, 3]. In other fields such as games, movies, food, and clothing, whether in form or content, its metabolism and update speed can be measured in days. Although teenagers are in the golden age of learning ability, campus learning is purer, which is quite different with social needs [4]. At the same time, the source of social risk is not only limited to the material level but also the spiritual and psychological level. Different from the relatively pure interpersonal relationship in family and campus, the interpersonal relationship in society is more complicated, and its interest entanglements have a more far-reaching impact [5]. If teenagers cannot adapt to the interpersonal relationship in society, it will have a serious negative effect on their healthy psychological development. For example, when teenagers cannot adapt to the struggle for power in the workplace, they will be excluded and suffer from

frustration or depression, and when teenagers excessively promote themselves and turn their noses up at others, they will finally be excluded from the group [6]. Therefore, whether from the material level or the psychological level, the level of adaptation of young people to society determines whether they can grow and develop healthily in the future.

Social adaptation is a process of individual socialization and individuation, which requires adolescents to learn and master social skills, learn and follow social norms, and learn to judge social situations [7]. This process is also a formation and development process of adolescent personality. The psychologist Piaget analyzed adaptation from the biological point of view [8]. He believed that every psychological reaction of an individual belongs to one kind of adaptation, and the essence of adaptation is to achieve the balance between the organism and the environment. Khromov proposes that adaptation is a complex, dynamic process involving the integration of human and environmental systems [9]. Both positive and negative adaptation involve the interaction between the individual's internal system and the social environment system. Psychologist Spencer put forward the term "social adaptation," and he believes that life is the adjustment of internal relations and external relations, and individuals adapt to the external environment through continuous adaptation, assimilation, and compliance [10]. Social adaptability refers to a kind of executive ability that people can make various adaptive changes in psychology, physiology, and behavior in order to better survive in society, so as to achieve a harmonious state with society [11]. Social adaptability reflects the level of a person's comprehensive quality but also reflects a person's survival ability in the society. The social adaptability of adolescents reflects the continuous and ever-changing interaction process between adolescents and various environmental factors. Among them, adolescents are the subject of social adaptation, social situation is the object they need to adapt to, and change is the central link of social adaptation [12]. It can be either teenagers adapt to social situation by changing themselves, or teenagers adapt to their own needs by changing social situation. From the perspective of individuation, teenagers need to transform themselves according to the needs of social environment in the process of integrating into society, and the process of accepting the result of self-transformation belongs to the process of self-adaptation in social adaptation. The so-called social environment includes the interpersonal relationship with people as the main body and the natural environment with material as the main body [13]. At the same time, these two kinds of environments belong to the static environment, and the opposite is the behavioral response of people to the environmental needs. Therefore, based on reviewing past studies and consulting professors, this paper divides social adaptability into self-adaptive ability, interpersonal adaptability, environmental adaptability, and behavioral adaptability. Self-adaptive ability refers to the ability of adolescents to maintain stable development after changes in behavior, emotional mood, psychological cognition, and other aspects under the influence of social environment, which reflects their self-regulation ability and self-control ability [5]. Young people with strong self-adaptive ability can quickly adjust their mentality and behavior after being affected by the environment, forming a new style, while young people with poor self-adaptation ability are difficult to accept the change in themselves after being affected by the environment thus unable to adapt to environmental changes, resulting in development stagnation or wrong road [14]. Interpersonal adaptability refers to the ability of adolescents to handle interpersonal relations well, which requires people to adjust and control themselves and make correct and appropriate responses in the process of contact with others [10]. Adolescents with strong interpersonal adaptability can maintain a harmonious and stable relationship with others, which is respectful, honest, and friendly, while adolescents with poor interpersonal adaptability are difficult to establish a stable interpersonal relationship with others, and even unwilling to contact and communicate with strangers. Behavioral adaptability refers to the ability of adolescents to adapt to their behavior when they need to change their behavior under the influence of social environment [15]. Behavioral adaptability reflects the individual ability and quality of adolescents, and it is also an indispensable basic quality of adolescents after they enter the society [16]. Adolescents with strong behavioral adaptability can quickly learn and master new ways of behavior, thus maintaining the sustainability and stability of their own development, while adolescents with poor behavioral adaptability find it difficult to learn and master new ways of behavior and to cope with and solve the difficulties encountered, which leads to the stagnation of their own development. Environmental adaptability refers to the ability of adolescents to maintain their stable development in the face of environmental changes. Environmental adaptability reflects the sensitivity and adaptability of adolescents to changes in social environment [11]. Teenagers with strong environmental adaptability can quickly integrate into the new social environment and express themselves stably and effectively. However, teenagers with poor environmental adaptability will feel uncomfortable after entering the new social environment and even have expression disorders, resulting in failure to integrate into it.

1.2. Mental Health. Mental health refers to the good degree of a person's psychological and emotional state, which includes individual emotions, cognition, behavior, interpersonal relations, and other aspects, reflecting a person's psychological balance, stability, and adaptability [17]. The important results of the process of adolescent social adaptation are the following: one is to have the means of production needed for social life, and the other is to form personality and values adapted to the social environment. Therefore, in a sense, social adaptability can be regarded as a manifestation of mental health, reflecting people's performance and ability in the process of social interaction [18]. If young people have mental health problems, it is easy to lead to difficulties in social communication, interpersonal relations, conflict resolution and other aspects, and lack of adaptability or the ability to deal with various social situations and cope with social pressure; at the same time, long-term social adaptability may affect a person's mood,

personality, self-esteem, etc. and aggravate their mental health problems [12]. As a result, inadequate social adjustment and mental health problems often interact. Addressing social resilience can help prevent and respond to mental health problems, while improving mental health problems may also help improve individuals' social resilience.

However, the mental health of contemporary adolescents is facing serious challenges, which will have a serious impact on their social adaptability. First of all, with the rapid economic development, many countries or regions are experiencing social changes such as fast-food marriage, abnormally high divorce rate, dual-income families, and a large gap between the rich and the poor [19]. The unsatisfactory growth environment will have a negative impact on the mental health of teenagers and then lead to social resistance among teenagers. For example, the number of suicides among school students in Japan reached 512 in 2022 [20]. The main reasons for suicide are fear of poor academic performance, poor career prospects, and stress related to school and university entrance exams, the root cause of which is the inability of students to make corresponding changes to the expected external environment, that is, inadequate social adaptation. Second, with the popularity of we-media and various social platforms, teenagers receive a wide variety of information and communication objects, which is difficult to control, and inevitably mixed with some components that are not conducive to the physical and mental health of teenagers, and then threaten or harm their mental health [21]. Relevant studies show that teens who regularly use Facebook can have lower self-esteem due to negative feedback on social media or unrealistic expectations created by comparison [22, 23]. Third, with the advancement of urbanization, people's life is becoming more and more convenient, making it difficult for teenagers to realize the hardships behind a convenient life, resulting in their understanding of society biased towards simplicity and idealization, and such teenagers often have a large psychological gap in the face of cruel social reality and even lead to anxiety or depression [24].

1.3. Objectives and Hypotheses. Adolescents' mental health problems are closely related to their social adaptability. Therefore, improving their mental health may have a positive correlation with improving and enhancing their social adaptability. Mental health education are relatively direct and economical ways for adolescents to access. It is a recommended form of education. Based on this, this paper puts forward the following basic assumption:

Hypothesis 1. Mental health education has a significant positive effect on adolescents' social adaptability.

When the social environment changes, the adaptability of adolescents to the new social environment is the social adaptability of adolescents. It can be seen that the social adaptability of adolescents is closely related to the social situation they are in. At the same time, the social environment of adolescents exerts its effect by restricting or adjusting their own characteristics and behaviors, such as age, gender, and growth environment. In other words, some characteristics of adolescents themselves may have a certain impact on their level of social adaptability. At the same time, adolescents' mental health status will also be affected by their own characteristics. Therefore, this paper selects several key characteristics of adolescents and puts forward the following basic assumptions:

Hypothesis 2. The age of adolescents has a significant positive effect on their level of social adaptability.

Hypothesis 3. The gender of adolescents is significantly correlated with their level of social adaptability.

Hypothesis 4. Adolescents from urban areas have a higher level of social adaptability than those from rural areas.

Hypothesis 5. Adolescents from one-child families have a higher level of social adaptability than those from non-one-child families.

2. Materials and Methods

2.1. Participants. In this study, adolescents aged 13-18 were selected from a middle school and a high school in Beijing ($N = 712$, $M = 15.76$, SD = 2.338). In order to keep the total number of students in the control group and the observation group consistent, 30 students were selected from each class, totaling 720 students. However, due to the withdrawal of 4 students in the observation group at a later stage, 4 participants were removed from the control group accordingly, and the total sample size was 712. In each grade, 2 classes were set as observation group and 2 classes as control group. The observation group was composed of 180 junior middle school students and 176 senior high school students, and the control group was composed of 176 junior middle school students and 180 senior high school students. There was no significant difference in grade composition between the observation group and the control group ($p > 0.05$). The observation group consisted of 167 girls and 189 boys, and the control group consisted of 169 girls and 187 boys. There was no significant difference in gender composition between the observation group and the control group ($p > 0.05$). The observation group was composed of 206 students from urban areas and 150 students from rural areas, and the control group was composed of 209 students from urban areas and 147 students from rural areas. There was no significant difference in the composition of students from the observation group and the control group ($p > 0.05$). Before the investigation, the two schools did not set up mental health education courses. After the study was carried out, the classes including the observation group offered mental health education courses. However, this study only conducted a follow-up investigation on selected participants. The consent of the students, their parents, and the school was obtained before the study was carried out. The mental health education course was in the charge of a professional psychological teacher. Meanwhile, the questionnaire designed was reviewed and improved by a professional psychological teacher.

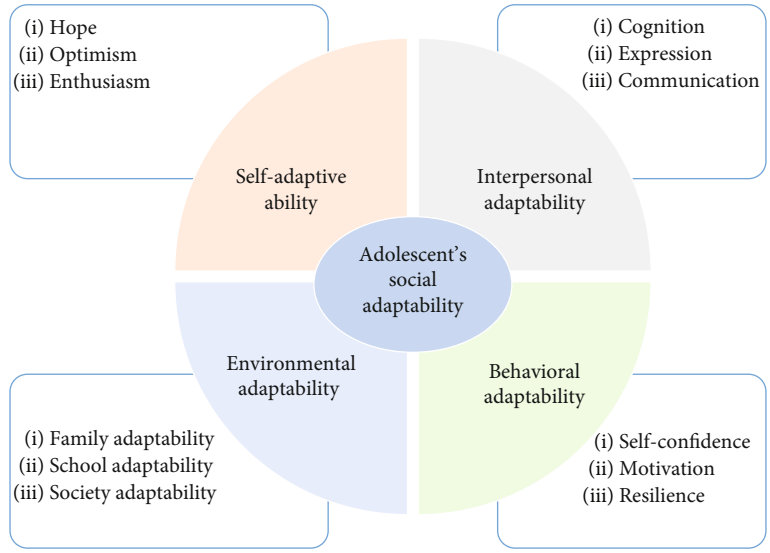

Figure 1: Details and framework of adolescent's social adaptability.

2.2. Social Adaptability Scale. Based on a literature review, survey, and expert consultation, this study constructs the adolescent social adaptability scale [25, 26]. The scale consists of four subscales, namely, self-adaptive ability scale, interpersonal adaptability scale, behavioral adaptability scale, and environmental adaptability scale. Each scale is divided into three dimensions, as shown in Figure 1. The self-adaptive ability scale includes three dimensions of hope, optimism, and enthusiasm; the interpersonal adaptive scale includes three dimensions of cognition, expression, and communication; the behavioral adaptability scale includes three dimensions: self-confidence, motivation, and resilience; and the environmental adaptability scale includes three dimensions: family adaptability, school adaptability, and society adaptability [27, 28]. Each scale contains 12 questions, 4 questions for each dimension, of which 2 questions are asked in the forward direction and 2 questions are asked in the reverse direction [29]. Meanwhile, the scoring method of the reverse direction is also opposite to that of the forward direction. Likert scale 1 to 5 was used for all the above scales. The higher the score, the better the performance of the investigators in this aspect. The average score of all questions in each dimension is taken as the final score of this dimension, and the sum of all dimensions in each scale is the final score of this scale. In this study, Cronbach's α of self-adaptive ability, interpersonal adaptability, behavioral adaptability, and environmental adaptability were 0.832, 0.841, 0.866, and 0.826, respectively, indicating good reliability. CFA results showed that $\chi^2 = 6531.52$, $p < 0.001$, df = 1003, TLI = 0.89, CFI = 0.92, RMSEA = 0.044, SRMR = 0.04, and the fitting coefficient met the statistical requirements.

2.3. Mental Health Education. This study designed a set of mental health education courses for teenagers in school, with a total of 13 courses [30, 31]. In the first 12 lessons, each lesson corresponds to a dimension, and the 13th lesson is comprehensive practice. The main teaching methods include the following [32, 33]. The first is case interpretation (CI), which interprets a point of view through real or fictional cases so that students can better understand and perceive abstract mental health concepts. Students can also gain practical experience from the case and develop critical thinking and problem-solving skills based on the analysis of the case. Meanwhile, the characters in the case can also cultivate students' moral concepts and mindfulness psychology and enhance students' attention and concern on mental health issues. The second is situational simulation (SS), which simulates real-life or specific situations, while having participants role-play to get involved in the situation and make decisions, solve problems, or demonstrate relevant skills. Situational simulation can provide students with practical opportunities to apply the health knowledge and skills that they have learned to actual scenarios; deepen their understanding and mastery of knowledge; at the same time, think and evaluate the pros and cons of different choices in the context; strengthen cooperation, communication, and negotiation with others; improve students' cognition, expression and communication abilities; and enhance students' adaptability to specific situations. The third type is student discussion (SD); that is, after the teacher puts forward the case or point of view, the students discuss and draw the final conclusion by themselves, and then, the teacher corrects and summarizes. Free discussion among students can enhance students' divergent thinking; promote the exchange of emotions and ideas between students; help to cultivate students' cognition, expression, and communication; and also help to stimulate students' self-confidence and action. The fourth is the interaction between teachers and students (ITS); that is, after the teacher or students put forward their views, the teacher makes the students continuously and gradually think deeply through questioning or guidance and finally make decisions by communication or proposes questions. Due to the professional knowledge background and rich social experience, the teacher can fully mobilize and stimulate the students' thinking ability, so as to improve the students' cognition and expression ability. The fifth is skill training (ST),

Table 1: Brief scheme of mental health education.

Dimension	Subdimension	Time	Teaching methods	Expectation
Self-adaptive ability	Hope	Week 1	CI+ITS	Promote or improve participants' life ideals and sense of faith in the face of difficulties
	Optimism	Week 2	CI+ITS+ST	Promote or improve the participants' motivation and mentality when dealing with things
	Enthusiasm	Week 3	SS+ITS+ST	Promote or improve participants' initiative and enthusiasm in interpersonal communication
Interpersonal adaptability	Cognition	Week 4	CI+ITS+ST	Enable participants to understand or master the understanding and discrimination methods of social reality
	Expression	Week 5	SS+SD+ITS+ST	Enable participants to understand or master some expression skills in different social situations
	Communication	Week 6	CI+SD+ST	Enable participants to understand or master some chatting skills
Behavioral adaptability	Self-confidence	Week 7	CI+ITS+ST	Increase or improve participants' satisfaction with themselves and their confidence in doing things
	Motivation	Week 8	CI+SS+ITS+ST	Promote or improve participants' enthusiasm and initiative when doing things or solving problems
	Resilience	Week 9	CI+SS+ST	Enhance or improve the resilience of participants in the face of difficulties and failures, so that participants can master some confidence-boosting skills
Environmental adaptability	Family adaptability	Week 10	CI+SS+ST	Enhance or improve participants' cognition and understanding of family and parents and enable participants to master some skills to deal with family conflicts
	School adaptability	Week 11	CI+SS+ST	Enhance or improve participants' cognition and understanding of the school, teachers, and classmates and enable participants to master some skills to deal with campus conflicts
	Society adaptability	Week 12	CI+SS+SD+ST	Enhance or improve participants' cognition and understanding of society, so that participants can master some skills to avoid social risks
Comprehensive exercise		Week 13	SS+IST	Let the participants fully demonstrate the learned skills in the scenario simulation or discussion

including emotional management, self-motivation, and interpersonal relationship management. These skills can help teenagers improve hope, optimism, enthusiasm, and self-confidence; enhance social skills; and improve flexibility and resilience in dealing with problems. Limited by the length of the course and the characteristics of the teaching methods, the teaching methods adopted by each course are different to some extent, and the specific application schemes are shown in Table 1.

2.4. Procedure. This study conducted two questionnaires successively. Before mental health education, the whole class was surveyed, and the questionnaires of selected participants were screened out. After the end of the first questionnaire survey, the control group maintained the original education program, while the observation group added mental health education courses and some mental health education activities, one time per week, and the professional psychology teacher was responsible for it. The series consulted parents, teachers, and professional psychologists and gained their agreements. Due to the limitation of teacher resources, two teachers are in charge of each school, so it is impossible for students in the control group and the observation group to have the same classes on the same day. In order to minimize the impact of class time, this study takes turns to carry out classes from 15 : 00 to 16 : 00 from Monday to Thursday every week.

3. Results

3.1. Difference Test of Social Adaptability of Adolescents between Observation Group and Control Group. Independent sample T test was conducted for the social adaptability of the observation group and the control group, and the results are shown in Table 2. It can be found that before mental health education, the social adaptability of adolescents in the two groups did not have significant differences in the four dimensions and 12 subdimensions ($p > 0.05$), while after receiving mental health education, the social adaptability of the observation group was significantly

Table 2: Comparison of adolescents' social adaptability before and after mental health education ($M \pm SD$).

Survey contents		Prior to mental health education		t_p		After mental health education		t_a		t_{pa}	
		Observation group	Control group	Subdimension	Dimension	Observation group	Control group	Subdimension	Dimension	Subdimension	Dimension
Self-adaptive ability	Hope	12.31 ± 2.84	12.29 ± 2.90	13.364	25.695	12.42 ± 2.75	17.32 ± 2.81	-1.286***	-1.669***	-1.359***	-1.732***
	Optimism	13.25 ± 2.44	13.13 ± 2.58	15.842		13.33 ± 2.36	16.84 ± 3.12	-1.743***		-1.813***	
	Enthusiasm	11.46 ± 2.01	11.52 ± 2.12	-14.658		11.54 ± 1.89	17.65 ± 2.68	-0.958***		-0.976***	
Interpersonal adaptability	Cognition	9.45 ± 1.25	9.49 ± 1.32	-20.446	21.476	10.01 ± 1.44	15.38 ± 2.65	-1.576***	-1.856***	-1.589***	-1.864***
	Expression	11.02 ± 1.86	10.96 ± 1.91	17.547		11.22 ± 1.74	17.24 ± 1.91	-1.285***		-1.412***	
	Communication	13.02 ± 2.03	12.97 ± 1.98	18.583		13.15 ± 1.89	17.68 ± 3.01	-1.984***		-2.039***	
Behavioral adaptability	Self-confidence	13.89 ± 2.25	13.94 ± 2.43	-16.867	-28.794	14.02 ± 2.38	17.14 ± 2.68	-2.032***	-1.968***	-2.008***	-1.897***
	Action motivation	14.42 ± 2.24	14.38 ± 2.31	21.632		14.58 ± 2.33	17.25 ± 2.01	-2.156***		-2.119***	
	Resilience	10.84 ± 1.69	10.88 ± 1.74	-26.146		11.42 ± 2.02	16.87 ± 2.11	-1.133***		-1.212***	
Environmental adaptability	Family adaptability	14.64 ± 2.31	14.57 ± 2.36	17.649	32.533	15.77 ± 2.26	16.14 ± 2.20	-3.254*	-2.384***	-3.114*	-2.458***
	School adaptability	14.88 ± 2.07	14.82 ± 2.10	19.663		15.02 ± 2.21	17.66 ± 1.85	-2.163***		-2.185***	
	Society adaptability	9.64 ± 1.77	9.62 ± 1.80	26.125		9.88 ± 1.95	15.23 ± 2.97	-0.904***		-0.973***	

Note: $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$; the following tables are the same with it.

different from that of the control group in the four dimensions and 12 subdimensions. The difference significance level of family adaptability is $p < 0.05$, and the difference significance level of the other 11 subdimensions and 4 dimensions is $p < 0.001$. In contrast, hope, enthusiasm, expression, resilience, and society adaptability have more obvious improvement effects, while family adaptability has relatively poor improvement effects. In addition, although the scores of each subdimension and dimension in the control group improved after three months of experience, there was no significant difference ($p > 0.05$). Above all, Hypothesis 1 is supported.

3.2. Difference Test of Social Adaptability of Adolescents in Demographic Characteristics. Independent sample T test was conducted on the social adaptability of the junior middle school (JMS) group and senior high school (SHS) group, and the results are shown in Table 3. It can be seen that the scores of all dimensions of social adaptability of SHS students are higher than those of JMS students regardless of whether they have not received mental health education or have received mental health education, and all have significant differences ($p < 0.01$). Among them, the difference significance of optimism and social adaptability is $p < 0.01$, and the difference significance of other dimensions is $p < 0.001$. By comparing the social adaptability of JMS students and SHS students before and after mental health education, it can be found that the social adaptability of JMS students and SHS students is in the hope, cognition, expression, resilience, and society adaptability that have all improved significantly ($p < 0.001$). In addition, JMS students' social adaptability also improves remarkably in enthusiasm and school adaptability ($p < 0.001$). The improvement of JMS students' and SHS students' social adaptability in other subdimensions also has significant differences ($p < 0.01$). After receiving mental health education, the improvement of JMS students' social adaptability in enthusiasm and school adaptability ($p < 0.001$) is obviously higher than that of SHS students ($p < 0.01$). And in hope, cognition, expression, communication, self-confidence, motivation, resilience, and family adaptability, the improvement of society adaptability is close to that of high school students ($p < 0.001$). Therefore, Hypothesis 2 is supported.

The independent sample T test was conducted for the social adaptability of male and female, and the results are shown in Table 4. It can be seen that there is no significant difference between the social adaptability of male and female in all dimensions and subdimensions ($p > 0.05$), no matter whether they have not received mental health education or have received mental health education. By comparing the social adaptability of male and female before and after mental health education, it can be found that although male and female have significant improvement in all dimensions and subdimensions of social adaptability ($p < 0.01$), there are certain differences in the improvement effects of male and female in different subdimensions. For example, the improvement of optimism, enthusiasm, and self-confidence of male is slightly worse than that of female, but the improvement of cognition and motivation is slightly better than that of female, and the improvement of other subdimensions is basically similar. Therefore, there is not enough proof to support Hypothesis 3.

An independent sample T test was conducted on the social adaptability of students growing up in rural areas and urban areas, and the results are shown in Table 5. As you can see, whether there is no mental health education or there is mental health education, adolescents in rural areas have significantly better performance on resilience and family adaptability than adolescents in urban areas ($p < 0.001$). Adolescents in urban areas have social adaptability in cognition, expression, communication, self-confidence, and school adaptability; the social adaptability is significantly better than that of adolescents in rural areas ($p < 0.001$). Adolescents in urban areas have significantly higher social adaptability than adolescents in rural areas in four dimensions ($p < 0.001$), which is different from the difference law in subdimensions. But it also shows that the comprehensive level of social adaptability of adolescents in urban areas is higher than that of adolescents in rural areas. Adolescents in urban areas and adolescents in rural areas are compared before and after undergoing mental health education. It can be found that the social adaptability of adolescents in the two groups has been significantly improved ($p < 0.05$), while adolescents in urban areas have a more obvious improvement effect on motivation compared with adolescents in rural areas. Adolescents in rural areas have a more obvious improvement effect in cognition compared with adolescents in urban areas, and the improvement effect in other aspects is basically similar. Above all, the Hypothesis 4 is supported.

An independent sample T test was conducted on the social adaptability of adolescents in single-child family and multichild family, and the results are shown in Table 6. As you can see, whether there is no mental health education or there is mental health education, the social adaptability of adolescents in single-child family is obviously better than that of adolescents in multichild family on expression, communication, resilience, and society adaptability ($p < 0.001$), as well as hope, optimism, and self-confidence ($p < 0.01$), and adolescents in multichild family's social adaptability are obviously better on enthusiasm, cognition, motivation, and family adaptability than adolescents in single-child family adaptability ($p < 0.001$), but there is no significant difference in the performance of the two in school adaptability ($p > 0.05$). At the same time, the social adaptability of adolescents in single-child family is significantly better than that of adolescents in multichild family in four dimensions ($p < 0.01$), which is different from the difference law in subdimensions. But it also shows that the comprehensive level of social adaptability of adolescents in single-child family is higher than that of adolescents in multichild family. By comparing the performance of adolescents in single-child family and adolescents in multichild family before and after undergoing mental health education, it can be found that the social adaptability of adolescents in both groups has significant improvement. Among them, compared with adolescents in single-child family, adolescents in multichild family's social adaptability has a more obvious improvement

Table 3: Comparison of adolescents' social adaptability under the influence of grades ($M \pm SD$).

Survey contents		Prior to mental health education		t_p		After mental health education		t_a		t_{pa}	
Dimension	Subdimension	JMS	SHS	Subdimension	Dimension	JMS	SHS	Subdimension	Dimension	JSM	SMS
Self-adaptive ability	Hope	9.96 ± 2.63	14.30 ± 2.92	1.726***	0.965***	15.38 ± 2.55	18.32 ± 2.75	2.342**	1.445***	0.946***	1.133***
	Optimism	12.12 ± 2.26	15.34 ± 2.48	2.131**		14.03 ± 2.25	16.92 ± 3.18	2.856**		2.163**	2.896**
	Enthusiasm	9.13 ± 2.12	13.38 ± 2.03	1.624***		15.54 ± 1.89	17.65 ± 2.68	2.538**		0.832***	2.362**
Interpersonal adaptability	Cognition	7.28 ± 1.16	11.49 ± 1.28	1.536***	0.887***	13.26 ± 1.54	16.64 ± 2.43	2.017**	1.232***	0.817***	0.934***
	Expression	8.85 ± 1.74	13.04 ± 1.88	1.618***		15.42 ± 1.96	18.10 ± 2.42	2.227**		0.742***	0.831***
	Communication	10.87 ± 1.96	15.05 ± 2.07	1.832***		14.39 ± 2.13	18.48 ± 2.11	1.796***		1.759***	1.965***
Behavioral adaptability	Self-confidence	11.78 ± 2.33	15.92 ± 2.19	1.483***	0.765***	15.02 ± 2.25	18.83 ± 3.14	1.844***	1.183***	1.832***	2.362**
	Motivation	12.22 ± 2.04	16.48 ± 2.18	1.521***		15.63 ± 2.44	18.57 ± 2.58	1.965***		2.116**	2.448**
	Resilience	8.76 ± 1.72	12.91 ± 1.86	1.496***		14.15 ± 1.96	17.46 ± 3.03	1.864***		0.769***	1.028***
Environmental adaptability	Family adaptability	13.48 ± 2.44	17.68 ± 2.28	1.633***	0.843***	15.29 ± 2.24	19.26 ± 3.37	1.944***	1.215***	2.488**	2.886**
	School adaptability	12.77 ± 2.15	16.92 ± 2.13	1.642***		16.25 ± 1.73	18.29 ± 2.03	2.218**		0.846***	2.368**
	Society adaptability	7.52 ± 1.65	11.78 ± 1.82	1.996**		12.68 ± 1.92	16.84 ± 3.06	1.648***		0.735***	0.976***

Table 4: Comparison of adolescents' social adaptability under the influence of gender ($M \pm SD$).

Survey contents		Prior to mental health education		t_p		After mental health education		t_a		t_{pa}	
Dimension	Subdimension	Male	Female	Subdimension	Dimension	Male	Female	Subdimension	Dimension	Male	Female
Self-adaptive ability	Hope	12.34 ± 2.83	12.28 ± 2.87	10.389	16.534	18.06 ± 3.32	17.21 ± 2.93	15.349	18.435	0.643***	0.548***
	Optimism	13.72 ± 2.33	12.58 ± 2.60	3.034*		17.42 ± 3.27	16.75 ± 3.01	3.496		0.778***	1.249***
	Enthusiasm	11.14 ± 2.17	11.83 ± 2.10	-2.893*		17.18 ± 2.59	17.94 ± 2.77	-4.124		0.448***	0.636***
Interpersonal adaptability	Cognition	9.13 ± 1.13	9.72 ± 1.36	-3.167*	-13.334	14.86 ± 3.15	15.73 ± 3.81	-4.391	-10.538	0.682***	0.471***
	Expression	11.26 ± 1.79	11.03 ± 2.13	15.871		17.42 ± 2.59	17.33 ± 2.18	20.136		0.568***	0.491***
	Communication	12.97 ± 1.94	13.02 ± 1.85	-33.256		17.32 ± 3.20	17.77 ± 3.04	-21.563		0.864***	0.927***
Behavioral adaptability	Self-confidence	13.65 ± 2.25	14.12 ± 2.43	-3.249*	-20.166	16.62 ± 2.45	17.57 ± 2.83	-4.564	-7.399	1.147***	1.453***
	Motivation	14.71 ± 2.36	13.98 ± 2.14	3.356*		17.89 ± 3.28	17.02 ± 2.54	5.465		1.643***	1.286***
	Resilience	10.73 ± 1.39	10.94 ± 1.82	-16.524		16.59 ± 2.09	17.13 ± 2.86	-9.243		0.713***	0.649***
Environmental adaptability	Family adaptability	15.42 ± 2.15	15.78 ± 2.02	-14.829	18.735	17.63 ± 2.49	17.95 ± 2.14	-41.246	16.894	1.849**	1.928**
	School adaptability	14.92 ± 2.13	14.66 ± 2.01	15.186		17.83 ± 1.97	17.26 ± 2.02	13.464		1.769**	1.894**
	Society adaptability	9.71 ± 1.72	9.58 ± 1.61	11.265		15.47 ± 3.01	14.86 ± 3.28	19.176		0.745***	0.833***

Table 5: Comparison of adolescents' social adaptability under the influence of growing place ($M \pm SD$).

Survey contents		Prior to mental health education		t_p		After mental health education		t_a		t_{pa}	
Dimension	Subdimension	Urban areas	Rural areas	Subdimension	Dimension	Urban areas	Rural areas	Subdimension	Dimension	Urban areas	Rural areas
Self-adaptive ability	Hope	13.81 ± 2.74	10.79 ± 2.65	2.146**		18.44 ± 3.13	17.05 ± 3.84	2.459**		0.724***	0.443***
	Optimism	13.96 ± 3.02	10.25 ± 2.44	2.037**	1.132***	17.63 ± 2.95	15.98 ± 2.84	1.914***	1.835***	0.842***	0.685***
	Enthusiasm	12.94 ± 2.15	10.37 ± 2.49	2.214**		18.45 ± 3.28	17.49 ± 2.87	2.582**		0.794***	0.548***
Interpersonal adaptability	Cognition	11.36 ± 1.78	8.75 ± 1.96	0.859***		16.04 ± 2.25	15.18 ± 2.71	2.832**		0.671***	0.572***
	Expression	12.68 ± 2.46	9.76 ± 2.13	1.044***	0.929***	17.65 ± 2.03	16.84 ± 2.25	1.923***	1.364***	0.768***	0.712***
	Communication	14.65 ± 2.74	11.58 ± 2.33	1.243***		18.36 ± 3.15*	16.84 ± 3.28	1.246***		0.943***	0.814***
Behavioral adaptability	Self-confidence	15.10 ± 3.46	12.88 ± 3.03	1.179***		18.59 ± 2.97	16.72 ± 3.16	1.165***		1.038***	0.895***
	Motivation	14.88 ± 2.31	13.95 ± 2.36	2.954*	2.296***	17.15 ± 2.18	16.34 ± 2.56	2.318**	1.424***	1.532***	1.084***
	Resilience	9.74 ± 2.01	11.08 ± 1.97	-1.865***		15.88 ± 2.39	17.03 ± 2.68	-1.659***		0.859***	0.631***
Environmental adaptability	Family adaptability	14.92 ± 3.32	16.38 ± 3.95	-1.274***		16.10 ± 2.97	17.15 ± 3.86	-1.974***		1.748***	1.974***
	School adaptability	16.05 ± 2.59	14.14 ± 2.08	1.655***	2.182***	17.83 ± 2.03	16.75 ± 2.46	1.695***	1.393***	1.853***	1.437***
	Society adaptability	10.35 ± 1.96	9.18 ± 2.09	1.748***		16.18 ± 3.34	15.04 ± 3.68	1.598***		0.612***	0.522***

Table 6: Comparison of adolescents' social adaptability under the influence of the number of children in a family ($M \pm SD$).

Survey contents		Prior to mental health education		t_p		After mental health education		t_a		t_{pa}	
Dimension	Subdimension	Single child	Multichild	Subdimension	Dimension	Single child	Multichild	Subdimension	Dimension	Single child	Multichild
Self-adaptive ability	Hope	12.88 ± 2.92	12.13 ± 2.67	2.956**	2.586***	17.55 ± 2.48	16.85 ± 2.97	3.484*	3.925*	0.759***	0.988***
	Optimism	13.65 ± 2.56	12.89 ± 2.42	2.835**		17.36 ± 3.08	16.66 ± 2.49	3.269*		1.135***	1.482***
	Enthusiasm	11.16 ± 2.29	11.73 ± 2.02	-2.204***		16.65 ± 2.77	17.83 ± 2.92	-2.145***		0.674***	0.918***
Interpersonal adaptability	Cognition	9.36 ± 1.84	10.23 ± 1.45	-1.238***	2.485***	14.73 ± 2.52	15.51 ± 2.69	-2.231***	2.816**	1.224***	1.374***
	Expression	11.12 ± 1.95	10.58 ± 2.08	1.966***		18.06 ± 2.06	17.11 ± 2.34	2.199***		0.489***	0.524***
	Communication	13.65 ± 2.37	12.47 ± 2.02	1.343***		18.62 ± 3.11	17.38 ± 3.25	1.641***		0.643***	0.728***
Behavioral adaptability	Self-confidence	14.29 ± 2.98	13.64 ± 3.13	2.549**	2.696***	17.34 ± 2.52	16.83 ± 2.75	3.481*	3.844*	1.748***	1.856***
	Motivation	13.88 ± 2.59	14.48 ± 3.25	-2.106***		16.75 ± 3.20	17.64 ± 3.61	-1.974***		1.595***	1.683***
	Resilience	10.69 ± 1.72	9.93 ± 2.15	1.955***		17.03 ± 2.87	16.49 ± 3.51	2.813**		0.684***	0.765***
Environmental adaptability	Family adaptability	14.92 ± 3.49	16.03 ± 3.37	-1.082***	3.463**	15.88 ± 3.04	16.84 ± 2.85	-1.674***	3.775*	3.921*	4.382*
	School adaptability	14.92 ± 2.18	14.67 ± 2.35	10.486		18.01 ± 2.16	17.25 ± 2.73	1.485***		2.031***	2.143***
	Society adaptability	10.56 ± 2.84	9.45 ± 1.83	1.958***		16.36 ± 2.84	15.13 ± 3.42	1.338***		1.602***	1.721***

on hope, optimism, self-confidence, and resilience, and there was a significant difference in the performance of these subdimensions between the two groups. Adolescents in single-child family have more obvious social adaptability in cognition, and the improvement effect of school adaptability is more obvious than that of adolescents in multichild family. Therefore, Hypothesis 5 is supported.

4. Discussion

4.1. Mental Health Education Can Significantly Improve the Social Adaptability of Adolescents. According to the research results of this paper, mental health education has a significant effect on the social adaptability of adolescents, which is reflected in each subdimension level and also in each dimension level. In this study, 12 mental health education courses were set up, respectively, aiming at 12 elements of social adaptability. It can be seen from the research results that targeted mental health education courses can effectively improve the corresponding social adaptability of adolescents, while comprehensive mental health education courses can promote the all-round improvement of social adaptability of adolescents [34]. From the improvement effect of each subdimension, it can be seen that the scores of most molecular dimensions have been increased by about 5 points, with an improvement range of about 40% to 50%. It can be considered that the social adaptability of adolescents has been improved from the average level to a good level, and only the improvement effect of family adaptability is weak. This may have a certain relationship with the family environment of teenagers and being in adolescence. It can also be seen from the detailed results of the questionnaire that there are problems in different aspects of adolescents' social adaptability. For example, in the observation group, about 32.5% of adolescents have relatively weak self-adaptability but relatively strong environmental adaptability; about 41.4% of adolescents have relatively poor environmental adaptability but strong interpersonal adaptability. This indicates that the factors influencing adolescents' social adaptability are complex. It can be seen from the research in this paper that the age and growth environment of adolescents have a significant impact on their social adaptability. At the same time, although the gender of adolescents has a small impact on their social adaptability as a whole, it also has a certain impact on the subdimension. In addition, personality, interests, interpersonal relationships, and educational content may also have a certain impact on the social adaptability of adolescents. These factors are complicated and interrelated, so when carrying out mental health education for teenagers, we should not only set up corresponding counseling courses according to the problems existing in teenagers but also make the counseling courses more comprehensive based on the comprehensive quality.

In addition, from the perspective of the development process of this study, participants also have certain differences in their acceptance of different forms of mental health education. In the follow-up survey, it is found that adolescents with weak interpersonal adaptability are more willing to use the form of case explanation and show strong resistance to situational simulation. Adolescents with weak behavioral adaptability generally accept more discussion among students than interaction with teachers. However, when participants participated in these mental health education activities, they generally reported a new understanding of themselves. This also shows that an important means of mental health education is to provide young people with new horizons and insights, while guiding or correcting their current limited or unreasonable cognition, so that young people can form a more reliable cognition of themselves, others, and society and then improve their social adaptability. For example, the survey shows that when the mental health education curriculum is not set up, 85.4% of the students choose "whether they are willing to listen to their parents' opinions and make changes when their parents' opinions on your performance," and only 14.6% choose "they will carefully consider their parents' opinions" or "they are willing." After receiving the scenario-based mental health education course, 75.3% of the students chose "will carefully consider their parents' opinions" or "willing." This shows that when teenagers adjust themselves, they often make choices contrary to the requirements of parents or teachers because of their rebellious psychology, and mental health education can help teenagers adjust their mentality and perspective and relieve their rebellious psychology, so as to actively adjust themselves.

4.2. The Influence of Mental Health Education on Adolescents' Social Adaptability Is Different and Limited. The results show that age and growth environment have a significant impact on adolescents' social adaptability. At the same time, although gender has a small impact on the overall social adaptability of adolescents, there are still some differences in the specific performance of male and female social adaptability. This further verifies that social adaptability describes people's adaptability to the social environment, and the so-called social environment varies from person to person, which is not only related to people's objective conditions such as family environment and interpersonal relationship but also related to people's personality, interest, and cognitive ability, which makes the social adaptability of adolescents have obvious differences. At the same time, different adolescents also have different problems in their social adaptability. The survey data show that the average probability of no significant difference in scores of adolescents in 12 subdimensions is 0.036 (SD = 0.0059). The average probability that the number of subdimensions with significant differences is less than 3 is 0.278 (SD = 0.1054), which indicates that there is a significant difference in the level of social adaptability of adolescents. Although mental health education has a significant role in improving the social adaptability of adolescents, mental health education has certain limitations; for example, the methods of mental health education have limitations, and some methods require professional operating conditions. At the same time, the effect of mental health education is affected by the professional ability level of psychological experts. There are also limitations to what mental health education can achieve. Therefore, faced with the complex and diverse problems of adolescents'

social adaptability, mental health education has limitations in its influence. In this study, questions such as hope and enthusiasm are more likely to be improved by mental health education. But the improvement effect of family adaptability is not ideal. In the follow-up survey, it was found that for the participants, because they received the same set of courses, some courses would make them feel beneficial, and some courses would make them feel useless. This also shows that the effect of mental health education on the social adaptability of adolescents is different from person to person; therefore, in the development of mental health education plan, we should fully consider the conditions and needs of adolescents themselves and choose relatively appropriate and feasible education methods and content, so as to give full play to the role of mental health education.

4.3. Implications for Research, Policy, and Practice. The results show that mental health education can significantly improve the social adaptability of adolescents, but it also has obvious limitations, which should be paid attention to in the process of research and practice. Therefore, it is recommended to pay attention to the following points when adopting mental health education to improve teenagers' social adaptability. First is considering comprehensive individual differences for adolescents who are a diverse group; they have their own different backgrounds, experiences, and needs; in the mental health education, it needs to consider individual differences and respect the characteristics of adolescents, according to the actual situation of personalized education and support. Second is focusing on the stage of development for different age groups of adolescents who have different needs and challenges in terms of psychological and social adaptation. To understand the characteristics of the developmental stage of adolescents, according to the characteristics of their cognitive, emotional, and behavioral development, the corresponding mental health education is carried out to meet their specific developmental needs. Third is adopting a comprehensive approach: Mental health education is not limited to classroom teaching but can be carried out in a comprehensive way, such as group discussion, role-play, and case analysis, using various forms and methods of activities to enable adolescents to actively participate in and improve learning results. Fourth is laying emphasis on interaction and communication: encourage interaction and communication among adolescents and promote the development of social skills and interpersonal relationships between them. Through group activities and cooperative projects, young people can learn to cooperate, help each other, and communicate. Fifth is promoting self-reflection and self-awareness: encourage adolescents to engage in self-reflection; help them recognize their emotions, needs, and values; and provide them with appropriate tools and skills to help them develop self-awareness and self-management skills. Sixth is educational content and educational culture diversity, which means that the mental health education should take into account the characteristics and needs of multiculturalism, respect, and tolerance of different cultural backgrounds of young people and ensure diversity and inclusion in educational content and activities. Seventh is continuous assessment and adjustment for mental health education need to carry out continuous assessment and adjustment, to ensure the education effect and adaptability, according to the actual feedback and evaluation results, necessary modifications, and improvements.

4.4. Limitations. In this study, there are still several limitations to this study. Firstly, the samples were collected from two schools in Beijing which limited the findings' generalizability to other regions and populations; therefore, future study should incorporate more diverse and abundant samples to improve the generalizability and preciseness of the results. Secondly, the survey method was limited to a questionnaire although several participants were investigated by tracing all the process, while there were several questionnaires with plenty of gaps which might be caused by improper questionnaire design, vague questions, or strong guidance and leading to participants' incorrect understanding of the questions, thus affecting the validity of the data, and at the same time, some more complex and in-depth questions could not be added into the questionnaire to make the participants feel comfortable. Therefore, future study should adopt more scientific questionnaire or introduce more scientific survey methods. Last but not the least, the data were processed mainly by the independent sample T test which limited the mining and expressing of the data significance. Future study could incorporate more analysis methods to mining and exploring the significance and complex interrelationship of the data in-depth.

5. Conclusions

This paper analyzes the effect of mental health education on improving teenagers' social adaptability by means of comparative method and makes a quantitative evaluation. Studies have shown that after receiving mental health education, adolescents' social adaptability has been significantly improved, with statistical differences in self-adjustment ability, interpersonal adaptability, behavioral adaptability, and environmental adaptability as well as in all dimensions, indicating that mental health education has a significant and comprehensive effect on the improvement of adolescents' social adaptability. The social adaptability of adolescents is also affected by their own characteristics and growth environment, and these characteristics will further affect the effect of mental health education on the improvement of social adaptability of adolescents. Mental health education can improve and enhance adolescents' cognitive level of social environment through various means, so as to enhance their social adaptability. However, due to the fact that adolescents' social adaptability is composed of various elements and affected by various factors, the means and content of mental health education have certain limitations. Therefore, there are certain limitations in the effect of mental health education on the improvement of adolescents' social adaptability. The research shows that gender has no difference in the overall impact on adolescents' social adaptability, but there are certain differences in the subdimensions, while adolescents' age, growth environment, family environment,

and other factors have a significant impact on adolescents' social adaptability. Therefore, adolescents' social adaptability has obvious differences. Therefore, when setting up the mental health education curriculum, it is necessary to adopt a universally applicable teaching method and fully consider the characteristics and development needs of students so that students can benefit from mental health education to the maximum extent. Overall, this study provides significant and particular insights into the influence of mental health education on improving the social adaptability of adolescents. The findings of the study can serve as basic research materials for enhancing the social adaptability of adolescents. Future study could take these findings as the basis to further explore the complex and in-depth relationships between mental health education and social adaptability of adolescents.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] S. Kristine, B. Idunn, and H. Inés, "The impact of mental health problems in adolescence on educational attainment," *Scandinavian Journal of Educational Research*, vol. 66, no. 2, pp. 306–320, 2022.

[2] K. Daniele, P. Gambacorti, B. Maria, C. Palmieri, and L. Zannini, "Educational interventions to promote adolescents' mental health: a scoping review," *Health Education Journal*, vol. 81, no. 5, pp. 597–613, 2022.

[3] R. Kaili, M. Margherita, and P. Robert, "Examining associations between educational experiences and mental health from childhood to adolescences," *European Neuropsychopharmacology*, vol. 63, pp. 147-148, 2022.

[4] Z. Xiaoli, "Problems and Countermeasures of College Students' Mental Health Education," *Journal of Healthcare Engineering*, vol. 2022, Article ID 6430855, 6 pages, 2022.

[5] S. Simón and M. Joanne, "Perspectives of education and mental health professionals on adolescent school-based mental health promotion: a qualitative exploration," *The Lancet*, vol. 400, Supplement 1, p. S76, 2022.

[6] H. Kronsberg, A. F. Bettencourt, C. Vidal, and R. E. Platt, "Education on the social determinants of mental health in child and adolescent psychiatry fellowships," *Academic Psychiatry*, vol. 46, no. 1, pp. 50–54, 2022.

[7] M. B. Meier, "An analysis of adolescent mental health according to the social work competencies identified in the Council on Social Work Education," *International Social Science Review*, vol. 93, no. 2, 2017.

[8] J. G. Green, R. Oblath, S. S. Kessel, and M. Miller, "Assessing adolescent mental health service use: developing the adolescent mental health support scale (AMHSS)," *School Mental Health*, vol. 14, no. 1, pp. 136–152, 2022.

[9] A. Khromov, "Russian adaptation of questionnaire of mental health treatment stigma among adolescents: preliminary results," *European Psychiatry*, vol. 65, no. S1, pp. S439–S440, 2022.

[10] A. W. Rhiannon, A. S. Rebecca, A. K. Azlina, and A. P. John, *A scoping review of community-based mental health intervention for children and adolescents in South Asia*, Global Mental Health, Cambridge Prisms, 2023.

[11] J. M. Aldridge and K. McChesney, "The relationships between school climate and adolescent mental health and wellbeing: a systematic literature review," *International Journal of Educational Research*, vol. 88, pp. 121–145, 2018.

[12] G. H. William, "Impact of social change on school mental health session II—urbanization: education adaptations," *American Journal of Orthopsychiatry*, vol. 34, no. 2, pp. 238–240, 1964.

[13] I. Nashwa, G. Eman, N. Fiona, E. Rasha, and S. Mike, "Perspectives on mental health recovery from Egyptian mental health professionals: a qualitative study," *Journal of Psychiatric and Mental Health Nursing*, vol. 29, no. 3, pp. 484–492, 2022.

[14] O. L. K. Campbell, D. Bann, and P. Patalay, "The gender gap in adolescent mental health: a cross-national investigation of 566, 829 adolescents across 73 countries," *SSM-Population Health*, vol. 13, article 100742, 2021.

[15] M. Rosie, H. Neil, P. Praveetha, M. Anna, and S. Emily, "Adaptation of a school-based mental health literacy curriculum: from Canadian to English classrooms," *Global Mental Health*, vol. 8, article e39, 2021.

[16] Y. Jin, "The Promoting Effect of Mental Health Education on Students' Social Adaptability: Implications for Environmental," *Journal of Environmental & Public Health*, vol. 2022, pp. 1–10, 2022.

[17] S. Evseev, "Adaptive physical education and adaptive sports within the mental health-care system," *International Journal of Culture and Mental Health*, vol. 11, no. 1, pp. 109–112, 2018.

[18] S. Collishaw and R. Sellers, "Trends in child and adolescent mental health prevalence, outcomes, and inequalities," in *Mental Health and Illness of Children and Adolescents Worldwide*, E. Taylor, Ed., Springer, 2020.

[19] D. J. Kinnair, E. S. Anderson, and L. N. Thorpe, "Development of interprofessional education in mental health practice: adapting the Leicester model," *Journal of Interprofessional Care*, vol. 26, no. 3, pp. 189–197, 2012.

[20] H. Woodley, "Supporting minority groups in schools – reflections on training education mental health practitioners," *Journal of Mental Health Training, Education and Practice*, vol. 16, no. 6, pp. 468–479, 2021.

[21] Y. Chen and C. Sto, "Correlation of exercise style to mental health and social adaptability of college students," *Work*, vol. 69, no. 2, pp. 531–541, 2021.

[22] L. M. Gaias, S. Lindstrom Johnson, R. M. B. White, J. Pettigrew, and L. Dumka, "Positive school climate as a moderator of violence exposure for Colombian adolescents," *American Journal of Community Psychology*, vol. 63, no. 1–2, pp. 17–31, 2019.

[23] W. Xiaoyang, Z. Xiaowen, and L. Jingjing, "Application of virtual reality technology in adolescent mental health science education," *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 8783355, 11 pages, 2022.

[24] O. M. Laceulle, W. A. M. Vollebergh, and J. Ormel, "The structure of psychopathology in adolescence," *Clinical Psychological Science*, vol. 3, no. 6, pp. 850–860, 2015.

[25] C. M. Lombardi, R. L. Coley, J. Sims, A. D. Lynch, and J. R. Mahalik, "Social norms, social connections, and sex differences

in adolescent mental and behavioral health," *Journal of Child and Family Studies*, vol. 28, no. 1, pp. 91–104, 2019.

[26] P. Dias, L. Campos, H. Almeida, and F. Palha, "Mental health literacy in young adults: adaptation and psychometric properties of the mental health literacy questionnaire," *International Journal of Environmental Research & Public Health*, vol. 15, no. 7, p. 1318, 2018.

[27] I. Guseva and M. Meleshkina, "Psychology and pedagogical support of mental and personality health of disabled teenagers in the educational process," *Concept/Koncept*, vol. 9, pp. 1–9, 2014.

[28] L. Bo, "Design and implementation of mental health consultation system for primary and secondary school students based on credibility matching model," *Journal of Environmental and Public Health*, vol. 2022, Article ID 7986850, 10 pages, 2022.

[29] Y. Mori, E. Tiiri, P. Khanal, J. Khakurel, K. Mishina, and A. Sourander, "Feeling unsafe at school and associated mental health difficulties among children and adolescents: a systematic review," *Children*, vol. 8, no. 3, p. 232, 2021.

[30] N. Hoosen, E. L. Davids, P. J. de Vries, and M. Shung-King, "The strengths and difficulties questionnaire (SDQ) in Africa: a scoping review of its application and validation," *Child and Adolescent Psychiatry and Mental Health*, vol. 12, no. 1, p. 6, 2018.

[31] T. Bella-Awusah, C. Ani, A. Ajuwon, and O. Omigbodun, "Effectiveness of brief school-based, group cognitive behavioural therapy for depressed adolescents in South West Nigeria," *Child Adolescent Mental Health*, vol. 21, no. 1, pp. 44–50, 2016.

[32] G. Bukola, A. Bhana, and I. Petersen, "Planning for child and adolescent mental health interventions in a rural district of South Africa: a situational analysis," *Journal of Child and Adolescent Mental Health*, vol. 32, no. 1, pp. 45–65, 2020.

[33] L. Campos, P. Dias, F. Palha, A. Duarte, and E. Veiga, "Desarrollo y propiedades psicométricas de un nuevo cuestionario de evaluación de alfabetización en salud mental en jóvenes," *Universitas Psychologica*, vol. 15, no. 2, pp. 61–72, 2016.

[34] Y. Wei, J. A. Hayden, S. Kutcher, A. Zygmunt, and P. McGrath, "The effectiveness of school mental health literacy programs to address knowledge, attitudes and help seeking among youth," *Early Intervention in Psychiatry*, vol. 7, no. 2, pp. 109–121, 2013.