Research on the Interventions for Chinese Adolescents' Mental Health Issues Caused by the Great Pandemic

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Abstract: In today's world, mental health issues are being treated more and more seriously than 20 years ago. Adolescents, a transition phase from childhood to adulthood, are a group of people whose family, surroundings, and peers easily influence and are widely diagnosed with depression and anxiety symptoms. The Great Pandemic, as a worldwide influential phenomenon, also played a significant role in affecting people's mental states, especially for adolescents. In most countries in the world, adolescents' mental health conditions are severely worsened by the emergence of COVID-19; not only are adolescents who are already diagnosed as patients with mental disorders deteriorating, but also, more and more youths are showing a propensity for mental disorders, such as depression and anxiety. However, in China, where the implementation of policy, education system, and cultural factors are different from most Western countries, several techniques appear to alleviate adolescents' mental health. In this literature review, the researcher aims to discuss how emotional competence and family mutuality contribute to improving the mental health condition of Chinese adolescents during COVID-19 and give suggestions about how to apply these strategies in children's daily lives.

Keywords: emotional competence, Adolescents, mental disorders, family mutuality, COVID-19

1. Introduction

Several articles have shown that the Great Pandemic has adverse effects on people's mental health conditions. Articles have reported a vivid deterioration in adolescents' mental health caused by the Great Pandemic, which is demonstrated by reported family violence from parents, aggressive behaviors, and the prevalence of suicide attempts caused by the Lockdown, social distancing policy, and family parental pressure [1-4]. For instance, Dr. Duan and his colleagues discovered that 22.28% of 3613 Chinese students whom they surveyed through online recruitment experienced depression and anxiety during the COVID-19 pandemic [5]. Dr. Liang and her colleagues surveyed 584 adolescents two weeks after the COVID-19 took place in China, they used a questionnaire that is composed of understanding of COVID-19, the General Health Questionnaire (GHQ-12), the PTSD-Checklist-Civilian Version (PCL-C), and the negative coping styles scale, based on their results, about 40.4% of youth they sampled are likely to be diagnosed with psychological issues, and 14.% of sampled youth showed PTSD symptoms [6]. Without much exaggeration, COVID-19 is one of the most devastating and significant events that has taken place in recent years, which left an unforgettable shock on adolescents' minds.

Adolescence is an influential and determinant period for children to establish mental wellness and form good social and emotional habits. According to the World Health Organization (WHO), 10%-20% of adolescents in the world are experiencing mental disorders, and most of them are underdiagnosed and undertreated [7, 8]. According to statistical data from WHO, depression and anxiety are the fourth and sixth major reasons that lead to prevalent mental disorders among adolescents [7]. There is a high possibility for adolescents to have severe, even life-long mental disorders if they suffer tremendous pressure during urgent public events [9, 10]. For instance, Dr. Zhou and his colleagues used data from an online survey of 8,140 Chinese adolescents, indicating that the rate of depression and anxiety increased to 43.7% and 37.4% after COVID-19 [11]. Also, Researches in the United Kingdom and Switzerland predicted a highly possible worsening of adolescents' mental health conditions with the influence of Coronavirus [12, 13]. All these pieces of evidence suggest that COVID-19 negatively impacts this critical adolescence period worldwide.

Although China is one of the most strictly controlled countries in the world, studies and investigations also support the idea that COVID-19 has deteriorated Chinese adolescents' mental health condition [5, 14-20]. Firstly, in COVID-19 prevention, strict rules force students to keep social distance, reduce social interactions, and shorten their outdoor activities, which may lead to unhealthy mental conditions [5, 21-23]. Secondly, the Great Pandemic caused many schools to shift their classes to remote teaching, which increased the time students spend with electronic devices, which has been investigated as an adverse effect on adolescents' mental health [24, 25]. Consequently, using electronic devices reveals the inequality in family income, which also harms students' mental health [23, 25, 26]. Even though Chinese adolescents and students were in the safest circumstances, the impacts of the Great Pandemic cannot be ignored.

While almost all studies believed that the Great Pandemic influenced adolescents' mental health negatively, a study in the United States mentioned that adolescents with high levels of mental problems showed a declined tendency of symptoms in all aspects after the COVID-19 lockdown [9]. Besides, research interviewed 1,091 American family households about their mental health status after a massive natural disaster, researchers' report discovered that adolescents and children's mental stress, such as depression and anxiety, is negatively correlated with healthy communication with family members [27]. In addition, positive interactions with family members are a crucial factor contributing to mental disorder recovery [28, 29]. Investigations from some studies in China also showed that emotional competence intervention and family mutuality could alleviate Chinese adolescents' mental health status [30-32]. Moreover, research from different cities in China all reported a reduced depression and anxiety rate during the post-COVID-19 period compared with the time before the Great Pandemic, and most of the participants agreed with the importance of family mutuality and emotional competence in improving mental health. For example, a multicenter cross-sectional comparative investigation discovered that the rate of depression has decreased from 34.6% to 26.3%, and the number of patients who are severely depressed also decreased from 1.9% to 1.4%; this reduction also takes place in the anxiety rate of patients (dropped from 24.4% to 23.5%) [33-35]. According to these findings, the researcher wants to affirm the effectiveness of emotional competence and family mutuality in developing healthy mental conditions.

This article aims to evaluate the positive influence of COVID-19 on adolescents' mental health and some reasons contribute to this positive impact. Further, the researcher reviewed many pieces of literature to examine the effects of emotional competence and family mutuality and how to apply these strategies in real-world settings.

2. Methodology

The research question in this article concerns the impact of COVID-19 and other unexpected natural events on Chinese adolescents. In order to retrieve relevant articles, PubMed, PsycINFO, ProQuest,

and other databases were used to search for appropriate articles published from 2020 to the present for the following keywords: emotional intelligence or emotional competence, family mutuality, COVID-19 or Coronavirus, and health and specific disorder terms. The articles are separated into different dimensions. Firstly, the researcher examined the effect of COVID-19. In this portion, studies pointed out that COVID-19 does not just lead to a negative impact on adolescents' mental health conditions; It also brings positive changes in people's daily lives. Next, researchers evaluated the authenticity of emotional competence and family mutuality and then shared some practical strategies that can be applied in adolescents' development.

3. Emotional competence intervention

In some specific environments, emotional competence is also known as Emotional Intelligence. It was first and widely defined by Saarni as a solid social self-efficacy caused by emotion-eliciting interactions with others [36]. Further, Saarni mentioned eight emotional competence skills that can make a contribution to establishing good emotional competence. Firstly, similar to the concept of metacognition, when thinking about one's thinking, individuals should be aware of their own emotions so that people can understand and differentiate the various emotions they experience. Secondly, by integrating their understanding of different emotions into others' emotional expressions, individuals with this skill can get into new social environments/ atmospheres more easily. The third skill is to learn and utilize emotional expression vocabulary, such as anger, fear, sadness, happiness, etc. Fourthly, the empathic involvement ability is the ability that allows people to resonate with others in the emotional field. Fifthly, in this stage, people become more mature, which is demonstrated by realizing that people's emotional expression doesn't have to be in accordance with their internal emotional states. They start to raise the idea that their emotional behaviors, which express their attitudes and ideas, may make influences on others, and apply this idea in daily circumstances encountered. Sixthly, be aware that different ways of emotional communication will construct various types of relationships. For instance, the intimate relationship is partly defined by sharing true feelings and emotions, but the parent-child relationship doesn't always require this type of sharing. The next skill is emotional self-efficacy, which is the idea that individuals cognitively believe that the emotions they experience are precisely what emotions they genuinely want. The last skill is the ability for people to rapidly overcome unwanted or repugnant emotional states by applying personal self-regulating strategies [36]. So, in a more straightforward word, emotional competence can be defined as the ability of individuals to differentiate, comprehend, convey, regulate, and utilize others and their own emotions [37]. Recently, more and more studies have emphasized the importance of emotional competence in psychopathology, such as anesis of depression and anxiety [38-40]. In addition, an 18-hour emotional competence interventions study shows that the increase in emotional competence promotes a positive change in mental health [41]. Specifically, individuals with higher emotional competence usually have healthier mental states, which include fewer diagnosed symptoms of depression and anxiety. [38, 42, 43]. For example, an experiment conducted in Hong Kong about Adolescents' mental health and gaming addiction reported that promoting emotional regulation competence has a severe effect on improving Hong Kong adolescents' standard of living who are addicted to games and the internet [44]. The importance of emotional competence cannot be ignored: the emotional dysregulation is partly the dominating factor of more than half of the non-substance mental disorders in Axis I and Axis II listed in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) [45, 46]. In addition, studies discovered that emotional competence is negatively associated with a more stressful lifestyle, which means that people with higher emotional competence tend to be less plagued by common psychological disorders, such as anxiety and depression, and also less likely to commit suicide and feelings of exhaustion. In contrast, it correlates positively to feelings of happiness and quality of standard of living [47-51]. A reason to explain these

findings is that emotional competence will mitigate people's reactions toward adverse and bothersome events. People with higher levels of emotional competence treat these events in a less passive style and utilize coping and regulating resolutions that are more effective in dealing with those circumstances [52, 53]. For instance, research conducted in Iran strongly supports the availability and reliability of Berking's emotional competence intervention in developing self-emotion regulating ability [54]. These research results strongly support the importance of emotional competence. In this case, promoting emotional competence interventions seems necessary to establish an excellent mental health environment.

Several strategies have been proposed to help adolescents in developing emotional competence. Firstly, social and emotional learning (SEL) should be integrated with school courses as a criterion in the childhood development standard. Data evidence strongly supported this idea. According to articles and meta-analyses, in the United States, day-to-day childcare is pervasive; a considerable amount of mothers, even unemployed, will choose daily childcare services to promote the development of emotional competence during the young age of their children. Studies also found that about half a portion of kids aged from there to five in developing countries have taken programs about early period children's education [55, 56]. The world has realized that the SEL programs/ programs that aim to promote the development of emotional competence are one of the contributors to improving the overall qualities of the nations. In the last decade, national policies about early-age child development increased from seven (2000) to sixty-eight (2014). A report advocating early childhood development pointed out that more than 150 projects about early childhood development that cost over $1.7 billion were listed as future planning goals in the Inner-American Development Bank [57, 58]. Here are some specific examples: In the U.S., there are a lot of policies like the Every Student Succeeds Act (ESSA) published by states and federal governments, and an increasing number of actions have been published in other continents. For instance, Europe has proposed the iYes Project in the European Region Actions Schema for the Mobility of University Students (ERASMUS+) and the KidsMatter program in Australia [59, 60]. All those examples indicated the importance the government places on early childhood development programs. Specifically, an experiment was conducted in 2014 about the power of reading and feeling in regulating children's emotional competence [61]. Secondly, for individuals, mindfulness has been proven to have a positive impact on improving emotional competence [62]. Thirdly, children's social-emotional competence can be trained by programs that link children's goals, attributions, and behaviors, which are intended to develop children's executive function [63, 64]. By applying these strategies, no matter whether the government or adolescents themselves can establish a healthier mental state effortlessly.

4. Family mutuality

The Lockdown and Social Isolation policies changed adolescents' social networks with peers and friends to some degree. In the meantime, adolescents spend more time with family members, which makes family a vital social supportive resource [65]. According to reports, family functions such as family support, relationships, and status can protect children and adolescents from mental disorders [66, 67]. For instance, a sample based on 898 American adolescents pointed out that there is a vivid correlation between increased family support and lower levels of depressive symptoms during the Pandemic [68]. Based on the Intergenerational family systems theory, the malfunction of a family's prototypal relationship pattern may lead to more severe mental pressure and an increased possibility of being diagnosed as having mental disorders [69].

Moreover, a study conducted in 2020 indicated that a robust and healthy relationship with family members or friends is a helpful method everyone can use to deal with unexpected psychological discomfort during COVID-19 pandemic [70]. Researchers emphasized the importance of supportive attitudes and behaviors between family members in developing better mental health conditions by

comprehensively reviewed more than 200 studies about family relations and children's mental health [71]. Additionally, because of Chinese collectivist social attributes, family involvement is prevalent in all circumstances [72]. A report from 817 Chinese youth who have been exposed to natural hazards found that family support is one of the reasons in promoting why adolescents will seek mental help and rehabilitation [73]. All these findings manifest that the existence of a family in adolescents' development is non-negligible. Further, let us delve into the effects of family mutuality.

Family mutuality is the encouraging quality that leads to fostering healthy families, which includes love, interactions, and caring [72, 74]. Researchers believe that family mutuality, a shared feeling of cohesion and warmth, is one of the most crucial contributors among all factors in establishing healthy family dynamics [75]. With these ideas, researchers raised the idea that mutuality is the phenomenon in which the caregiver (typically parents in the household) and care receiver (usually children in the family) share experiences and reciprocate, thus sequentially strengthening the relationship between them [76]. Healthy family mutuality may be effective in decreasing the possible negative maladaptive psychosocial consequences caused by the COVID-19 lockdown, such as the damage to self-esteem that was mentioned in a previous part of this article [72]. Positive family interactions from parents, siblings, and other family members can contribute to relieving adolescents' mental stress.

In specific, in the study conducted by Dr. Shi and his colleagues, they surveyed 7,958 participants from five schools in Chengdu city (three senior highs and two junior highs) in two time spots when: before (Time 1: from the end of 2019 to the beginning of 2020) and after (Time 2: from the middle of June to the start of July in 2020) the COVID-19. In their observation and participants' self-administered questionnaires, both depression rate and anxiety rate decreased from the time before the Pandemic to the time after the Coronavirus, which leads to the conclusion that family mutuality works wonders for mitigating long-term mental disorders, such as depression and anxiety [30]. A large-sample study of 26,069 adolescent participants concluded that family is an overwhelmingly important factor in influencing adolescents' cognitive and socioemotional health [77]. According to previous findings, developing effective methods to promote family mutuality is necessary. By doing so, several strategies can be applied to eliminate the mental symptomatology, which may include having longer times of positive family interactions and communications, bidirectional support from family members, and thinking from others' perspective [30]. In this scenario, spending more time with family members, siblings, and friends also played a significant role in relieving mental problems.

5. Discussions

There are several limitations to this article. Firstly, data collection can only imply that emotional competence and family mutuality correlate to relieve adolescents' mental health. Since no experiment has been conducted, it is impossible to establish a causal relationship between these factors. Secondly, Adolescence is a long-term period; many variables play a role in establishing their mental condition. Even family mutuality cannot be unquestionably affirmed as the dominating factor; some factors, like the frequency of active communication between family members, conflict with peers and siblings (such as school bullying), and educational stress, may also lead to unhealthy mental conditions [72]. In addition, the goal of this study is exclusively centered on the effect of family mutuality and emotional competence on adolescents. So, in future studies, we can add siblings and other family members as research participants to understand better the effect of family mutuality and emotional competence on adolescents. Last but not least, although the research goal is about Chinese adolescents' mental health, the research articles about this population are insufficient; researchers should try to experiment with Chinese adolescents as their research sample population in the future.

6. Future direction

The results indicate that emotional competence and family mutuality can relieve Chinese adolescents' mental health. The researcher believes that Chinese culture plays a significant role in shaping Chinese adolescents' mental states and ideas. So, in the future, the researcher will survey Chinese moral standards and cultural effects on adolescents to investigate their influences on youths and emerging adults.

7. Conclusion

COVID-19, as a wide-range emerging pandemic, has dramatically affected people's daily lives worldwide. People, no matter children, adolescents, or adults, were suffering both psychological and physical pain greatly. Take America as an example. According to the data collected from the Centres for Disease Control and Prevention (CDC), 1,1146,774 people in the United States have passed away from the involvement of COVID-19, the Lockdown, social distancing, and social isolation policies bankrupted many companies, which also led to many homeless, negative mental states, and even death [78]. However, everything has two sides. Remote learning and working, as mentioned previously, fostered many new workspaces and strategies, and the time spent with family members and friends released people's pressure unexpectedly. In this article, the researcher overviewed the influence of COVID-19 on adolescents' mental health conditions reported by different articles and meta-analyses. The results indicated that adolescents with better emotional competence or healthy family relationships could, to some degree, improve the symptoms and severity of mental disorders compared with the manifestation before the Great Pandemic. However, in adolescents who lack emotional competence or favorable relationships with family members, their mental state conditions will commonly meet a lower stage. Adolescents, in a transition phase from childhood to adulthood, are especially sensitive to changes in surroundings, environments, and social relationships. In this case, the researcher further investigated some practical strategies that can be implemented to alleviate adolescents' mental disorders in the future.

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