The impact of sports activities on narrative psychology from the perspective of Caring ethics

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Abstract

This study uses narrative and positive psychology as its theoretical foundations to investigate the impact of sports activities on young people's mental health. Class 1 and Class 2 students of the Department of Economics and Management in the Modern College of Arts and Sciences of a normal university, as well as some front-line Physical Education (PE) instructors and ideological and political teachers of a normal university, were surveyed. This study utilized a questionnaire to collect information from respondents. Smart PLS 4.0 is used to analyze the data for this study. This study found that, from the perspective of compassionate ethics and in the context of the COVID-19 pandemic, physical activity can promote the mental health of adolescents, most notably by reducing anxiety, stress, depression, and feelings of isolation. This study determined that physical activity promotes the healthy growth of adolescent narrative psychology. Furthermore, physical activity significantly impacts adolescents' mental health, which can reduce adolescent ennui, boredom, and the risk of depression. Moreover, it can reduce stress, alleviate anxiety, and enhance adolescents' sleep quality. In addition, it can improve adolescents' mental health, cognitive health, thinking, learning, and general well-being.

Keywords: Caring ethics perspective; Physical activity; Psychology of narrative; Health behavior

1. Introduction

Narrative psychology refers to the psychological concept or position concerned with the narrative character of human behavior. Specifically, narrative psychology concerns how human behavior is structured and given meaning through narratives (Stambulova & Wylleman, 2019). When the narrative paradigm replaces the positivism paradigm of traditional psychology, people's life stories should become the primary focus of psychological research. Narrative psychology holds that individuals construct themselves through discourse. In any experience, meaning is derived from the construction of language, and personality is formed through narration (Pascoe & Parker, 2019). Simply put, various people have different life stories. The story offers a framework for comprehending the past and imagining the future.

It is a crucial framework for understanding human existence. The emergence of narrative psychology can be viewed as an alternative mode of thought to postmodernism's consideration of scientism in psychology. It is distinct from conventional psychology. The manifestation of narrative as a research method is the accumulation of data. In the history of psychology, the oral report method is a straightforward means to collect narrative data. (Pascoe, Hetrick, & Parker, 2020) assert that self-observation is the most effective method for studying such objects because those with conscious experience are the most knowledgeable about consciousness. Introspection is a verbal account of one's experiences. Also intrinsically introspective are clinical patient reports and responses to personality tests or attitude scales. These are verbal experience reports (Coşar & Orhan, 2019).

The narrative is the framework through which humans attribute meaning to temporal experience and individual action experience. The first function of narrative meaning is to convey people's understanding of life's purpose; the second is to connect people's daily actions and life events into a relatively cohesive unit of meaning. The story offers a framework for comprehending the past and imagining the future. It is a crucial framework for acquiring meaning in human existence. Here, "meaning" refers to the psychological meaning of individuals and the value of life, not the "meaning of words" defined by the dictionary. The personal account does not reflect specific objectives and universal external laws, so it lacks promotional value and external validity. The narrative is entirely based on the author's personal experiences and observations, which makes it incredibly complete and specific, unlike the abstract knowledge system of experts (Hutzler et al., 2019). This "knowledge derived from the individual's direct concrete experience" is referred to in narrative therapy as

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"indigenous knowledge." It is commonly believed that the more national something is, the more likely it will be global. It does not imply that the narratives of any particular cultural community or individual are universal, but rather that they enrich the cultural banquet of the world. It is commonly believed that mental health education is the sole responsibility of mental health instructors and has no bearing on other teachers. Teachers of all disciplines should be aware of their students' psychological development. Some educators believe that the purpose of mental health education is to assist students with mental disorders, and they tend to segregate mental health education from other teaching methods and moral education. The deviation of thought will always result in a variation of action. All aspects of education should incorporate mental health education. If students have psychological barriers, teachers should attempt to assist them; otherwise, students will readily resort to extremes, causing harm to their families and society as a whole.

Moreover, mental health is not only the absence of disease and impairment but also a complete physical, psychological, and social adaptation to a state of well-being (Salimi et al., 2023). Unfortunately, mental health promotion remains a neglected aspect of national efforts to improve human health. (Jewett, Kerr, & Tamminen, 2019) Mental health conditions include psychological, neurological, and substance use disorders, suicide risk, and related psychological, cognitive, and intellectual impairments. As the prevention and control of the novel coronavirus epidemic have reached a normal stage, many universities across the nation have implemented closed management to ensure the life, health, and safety of returning students. Due to the phenomenon of epidemic rebound, which still occurs occasionally across the country, and the stringent closed management measures, adolescents have developed varying degrees of negative emotions, anxiety, and depression being the most prevalent. Physical activity plays a significant role in enhancing adolescents' mental health and has a substantial impact on improving adolescents' quality of life (Rahmat, Muzaki, & Pernanda, 2021).

This study investigates the effect of sports activities on adolescent mental health under COVID-19 through a questionnaire survey. It verifies the benefits of sports activities on adolescent mental health through relevant experiments. The research demonstrates that participation in athletics can promote adolescent mental health, primarily by reducing anxiety, stress, depression, and loneliness, among other factors. From the perspective of human ethics, sports activities are recognized as positively affecting narrative mental health. In this study, the adolescents in the trusteeship were required to participate in athletics, which provided a theoretical foundation for improving their mental health.

2. Literature Review

Dragun et al. (2020) demonstrated that adolescents with IBD during COVID-19 isolation have an increased risk of adverse health indicators, particularly psychosocial function, and sleep problems. This study shows the importance of developing mental health strategies for adolescents with chronic diseases, particularly during pandemics. Health management is the comprehensive process of monitoring, analyzing, and evaluating individuals' or groups' health status and risk factors, providing health consultation and direction, and intervening in health risk factors (Sheldon et al., 2021). Health management that is scientific, reasonable, and effective for college students is also the personification of life care for college students. The health management of college students focuses on the characteristics of college students and their physical, psychological, and social adaptability, as well as other aspects of their health (Ekkekakis & Brand, 2019). In recent years, the number of sub-healthy individuals on college campuses has increased due to the increasing demands of study and work and the absence of an active and healthy lifestyle. In addition, there are rising rates of youth diseases (obesity, gastrointestinal diseases, heart disease, high blood pressure), various mental illnesses (depression, etc.), and suicide among students, and the weakened social adjustment ability of many students contributes to low grades and even affects employment (Coşar & Orhan, 2019).

It is evident that college students' health is in poor shape, with numerous hidden hazards. The implementation of college students' health management is to carry out school-based health management from the perspective of life care by focusing on various health problems of college students in school and to truly care and care for college students' health for them to develop healthy life values (Renatovna & Renatovna, 2021). In 1947, the World Health Organization (WHO) proposed a broader definition of health: health is the absence of disease or infirmity and a state of complete physical, mental, and social fitness. As a result of the introduction of a novel concept of health management to China in 2005, the understanding of the health management system in colleges and universities is expanding (Pascoe et al., 2020). Disrupting the old pattern of emphasizing health education without health management will take time. The overall trend in school

health management is a shift from "dependence type" to "self-help type." The essence of the self-help type is the cultivation of new lifestyle practices and the development of self-health consciousness and skill (Pham et al., 2019). It is believed that a healthy lifestyle and mental state can improve physical health rather than encourage students to seek medical treatment until the disease is terminal. People typically give attention to the collection of health information and the creation of health records, which must be conducted by the specialized institution of the school to which the students belong (Chiva-Bartoll et al., 2020). The records of healthy lifestyle and learning are presented to the school and work unit with admission and employment so that information can be obtained immediately and the various health-related risk factors can be assessed (Stambulova, Ryba, & Henriksen, 2021).

There are currently no accurate statistics regarding the number of employees in health management. It is estimated that more than 100,000 individuals live in China, but only 2% of the population utilizes scientific and professional health management services. Today, health management in the United States is expanding significantly (Rahmat et al., 2021). Seven out of ten Americans have access to health management services. Although numerous institutions in our country train talent in this area, neither the quality nor the quantity of personnel is sufficient to meet the needs. Varying numbers of individuals are engaged in health work in institutions. Some schools believe that health professionals are only required to conduct health promotion and education and superintend students' physical activity, study, and work (Hutzler et al., 2019). Some individuals engaged in this work lack professional training in this discipline, resulting in difficulties with work performance. Consequently, the school can use the community health service as a platform for professional development, and the team can complete the task. Having specialized health administrators involved in this aspect of work will be advantageous Resilience strategies to manage psychological distress among healthcare workers duri (Fernandez-Rio et al., 2020). In addition, foreign school mental health education focuses primarily on the organization and implementation of school mental health education and its model, content, evaluation, and other macro perspectives (Lister, Seale, & Douce, 2023). The components of school mental health education, such as the impact of narrative psychology on adolescents, are still understudied. This investigation has produced the following hypothesis:

Hypothesis 1: *There is a positive relationship between sports activities and narrative psychology from the perspective of caring ethics.*

3. Methodology

Class 1 and Class 2 first-year students of the Economics and Management Department of the Modern Arts and Science College of a regular university and some front-line PE instructors and ideological and political teachers of a traditional university were surveyed for this study. This study examines the impact of sports activities on the narrative psychology of adolescents from a compassionate perspective. Students' mental health was evaluated based on the design of UPI psychological survey questions and instructors' evaluations of students' psychological narrative guidance and communication. The University Personality Inventory (UPI) is a mental health and personality health questionnaire for college students designed for the early detection and treatment of students with psychological issues. A group of psychological consultants and psychiatrists from Japan University compiled the table in 1966. As the earliest and most widely used psychological survey scale in Chinese universities, it is primarily administered to college undergraduates as a mental health survey. The statistical data collected on the questionnaire for this study is analyzed using Smart PLS 4.0, a suitable data analysis instrument for complex and questionnaire-based data. In this study, Smart PLS 4.0 is used to assess the normality of the data, measurement, and structural model.

4. Research results

4.1 Data Normality

The initial evaluation of this study began with a data analysis and normality test. Before working on the final data analysis exam, it is necessary to determine the normality of the data. The normality of data is evaluated to determine whether the collected data is suitable for further research. In this manner, the missing values are also examined to ensure no response is lacking for a more accurate data analysis. However, the studies analyzed data using skewness and kurtosis to reach their conclusions. In this manner, the questionnaire data is entered into the Smart PLS 4.0 for testing data normality. The missing values, standard deviation, excess kurtosis, and skewness values appeared after entering data into Smart PLS. The results of the test for normality of data indicated that there are no missing values in this study. In addition, the study examined whether the skewness values fall between -1 and +1 (Royston, 1992). Thus, the research data have been deemed typical. The results of the normality test are shown in Table 1. Therefore, the data is considered suitable for further research testing.

Table 1

Data Normality

Items	No.	Missing	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
SA1	1	0	4.054	4	1	5	1.089	0.853	-0.183
SA2	2	0	3.575	4	1	5	1.158	-0.327	-0.578
SA3	3	0	3.935	4	1	5	1.083	-0.123	-0.781
SA4	4	0	3.939	4	1	5	1.027	0.165	-0.817
SA5	5	0	3.448	3	1	5	1.156	-0.480	-0.413
SA6	6	0	3.594	4	1	5	1.129	-0.575	-0.452
SA7	7	0	3.602	4	1	5	1.211	-0.577	-0.552
NP1	8	0	4.448	5	1	5	0.980	0.056	-0.907
NP2	9	0	4.218	5	1	5	1.051	0.075	-0.322
NP3	10	0	3.996	4	1	5	1.176	0.407	-0.115
NP4	11	0	4.061	4	1	5	1.173	0.518	-0.180
NP5	12	0	3.904	4	1	5	1.162	0.043	-0.931
NP6	13	0	4.038	4	1	5	1.141	0.499	-0.135

4.2 Measurement Model Assessment

The measurement model's evaluation is determined to identify convergent and discriminant validity. This concurrent validity test examines the extracted factor loadings, Cronbach alpha, composite reliability, and average variance. The results of factor loadings are reviewed to determine the individual-level validity of scale items used for any variable. When the loadings for each item are more excellent than 0.60, the factor loadings are significant (Shevlin & Miles, 1998). In addition, Cronbach alpha is used to assess the validity of the items' collective ability to represent any variable. Cronbach alpha values greater than 0.70 are statistically significant (Tavakol & Dennick, 2011), confirming the reliability of the study data. In the interim, the composite reliability test is used to ascertain the reliability of the research items utilized in this study. Alarcón and Sánchez (2015) determined that study data is deemed reliable when the findings of composite reliability are more significant than 0.70. The results of the extracted average variance are then used to test the conflict between the scale items used to measure any variable's data. The average variance extracted values supplied greater than 0.50 are statistically significant (Alarcón & Sánchez, 2015), confirming the conflict among the study's items. The data for convergent validity results are presented in Table 2, and the findings demonstrate that research data validity is attained. The data is valid and can be used for additional analyses, such as discriminant validity and path analyses.

Table 2

Convergent Validity

Variables	Items	Factor Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Narrative Psychology	NP1	0.679	0.906	0.928	0.684
	NP2	0.874			
	NP3	0.849			
	NP4	0.856			
	NP5	0.851			
	NP6	0.838			
Sports Activities	SA1	0.684	0.884	0.91	0.591
	SA2	0.701			
	SA3	0.809			
	SA4	0.840			
	SA5	0.759			
	SA6	0.742			
	SA7	0.833			

The discriminant validity test utilized in this study clarifies the discrimination between the scale items used to capture data for this study. However, this study utilized the cross-loading method to determine discriminant validity. The cross-loading way compares the results of each item of one variable with the results of each item of other variables. Thus, the values of one variable's articles must be greater than those of the other variable's things correlated with it (Barlat et al., 2013). Table 3 presents information regarding the discriminant validity of this study. The results demonstrate that the research data for discriminant validity have attained cross-loadings. Consequently, the data collected for this study are reliable and can be used to assess path findings further.

Table 3

Discriminant Validity

Variable	Items	Narrative Psychology	Sports Activities
Narrative Psychology	NP1	**0.679**	0.445
	NP2	**0.874**	0.537
	NP3	**0.849**	0.547
	NP4	**0.856**	0.524
	NP5	**0.851**	0.638
	NP6	**0.838**	0.601
Sports Activities	SA1	0.527	**0.684**
	SA2	0.410	**0.701**
	SA3	0.554	**0.809**
	SA4	0.624	**0.840**
	SA5	0.450	**0.759**
	SA6	0.432	**0.742**
	SA7	0.552	**0.833**

4.3 Structural Model Assessment

The findings of structural equation modeling are utilized for this study's path findings. The results of this research were determined using PLS bootstrapping calculations and partial least squares. This investigation is predicated on a solitary hypothesis. However, the hypothesis of this study has only one tail. Therefore, the t-statistics are calculated because the significant t-value for the directional hypothesis is 1.64 (Ramayah et al., 2018). Checking the data for t-values reveals that the relationship between sports activities and narrative psychology is statistically significant (original sample = 0.67, standard deviation = 0.043, t-statistics = 15.444, and p-values = 0.000). In addition, the results demonstrated that the intended direction of this relationship was positive and widely accepted. Table 4 displays the outcomes of the path findings.

Table 4

Path Findings

Path	Original Sample	Standard Deviation	T Statistics	P Values
Sports Activities -> Narrative Psychology	0.670	0.043	15.444	0.000

5. Discussion

Significant findings support this research's empirical data. Thus, the research-derived hypothesis 1 is adopted, as the t-statistics are statistically significant. The study has confirmed that, from the standpoint of human ethics, there is a positive relationship between sports activities and narrative psychology. According to Cielo, Ulberg, and Di Giacomo (2021), the college years are crucial for preventive behavior. Even though adolescents already have the cognitive capacity to make sound decisions regarding healthy behaviors, they encounter several temptations that can lead them in a different direction. This is the most likely time for them to adopt harmful lifestyles and behaviors. These undesirable lifestyles and behaviors will directly impact their future without appropriate guidance. The school-based health management should consider the psychological, physiological, and social issues students face at various phases of development and provide targeted advice. Therefore, health management in colleges and universities should fully consider students' growth and development, psychological, and other characteristics,

collect comprehensive data on their health and lifestyle, make accurate assessments and predictions, and play a scientifically valuable role in a warning. The COVID-19 pandemic has had pervasive effects on adolescents' mental health, primarily affecting middle school and college students (Dragun et al., 2020). Teenagers engage in various physical activity forms, including domestic exercise, school exercise, traditional fitness, aerobic exercise, and high-intensity activity forms. Isolation, exercise duration, frequency, and intensity are the primary factors affecting the effect of physical activity on mental health.

The study discovered that the COVID-19 epidemic increased adolescent ennui and that the level of boredom among high school students was greater than that of middle school students, with psychological capital mediating. Middle school students who engage in home exercise activities can effectively and positively impact their psychological capital in a state of isolation, thereby reducing the onset of boredom. During the novel coronavirus pneumonia, anxiety and depression were prevalent among middle school students, and they were accompanied by extensive online learning, gaming, and limited physical activity (Gupta & McCarthy, 2021; Heath, Sommerfield, & von Ungern-Sternberg, 2020). During the COVID-19 pandemic, physical exercise activities can precisely prevent, alleviate, and promote adolescents' psychological symptoms; however, the psychological state also inhibits the development of physical activities (Yomoda & Kurita, 2021).

According to research on college students, participation in physical activity during COVID-19 can improve their physique and health and enhance their emotional well-being. Students can relieve stress, discharge negative emotions, and reduce anxiety and depression through participation in sports (Heath et al., 2020). Regular participation in physical exercise activities by college students can improve their physical functions and regulate their emotional emotions, reduce tension, improve their negative emotions and psychology, and substantially impact their mental health. According to research on the effects of traditional fitness exercises on college students, during COVID-19, college students living close to colleges and universities had a significantly higher likelihood of developing adverse psychological conditions than usual. In addition, female college students had more severe adverse effects reactions (Chang et al., 2020). As a form of physical exercise in traditional Chinese cultures, such as Baduanjin, Wuqinxi, and other conventional fitness exercises are practiced. Qigong can not only strengthen the body, but it can also improve the mental health of college students during COVID-19, resist depression, alleviate tension and anxiety, promote physical and mental pleasure, and alleviate negative emotions.

According to research on the effects of the medium and high intensity on college students, for college students in the semi-closed or even fully closed management of paramilitary colleges, the impact of campus closure on college students' psychology is primarily manifested in anxiety and depression (Bissett, Kroshus, & Hebard, 2020). Running based on the fartlek running training method can reduce stress and depression in college students more than conventional methods. In addition, research on the relationship between physical exercise and anxiety found that in COVID-19. However, anxiety among individuals with demographic variables will be different. Despite these differences, physical activity has an apparent effect on reducing the anxiety of college students, mainly the frequency and intensity of exercise (Bissett et al., 2020). Similarly, regular physical activity for a specific period can improve college students' level of coping with pressure, relieve college students' stress, and promote the formation of college students' good state (Dai & Menhas, 2020) under the condition that other objective factors do not interfere. At the start of COVID-19, most colleges and universities delayed or even suspended the return to work of college students, leaving home exercise as the only option for daily practice (Chan et al., 2019).

Online yoga exercises performed at home by college students positively reduce and ameliorate negative psychological factors such as stress, anxiety, and depression (Tilga et al., 2019). Implementing mental health management for students from the perspective of caring ethics will assist college students in establishing positive and harmonious life values and achieving healthy development in multiple aspects, including physical, psychological, and social adaptability (Ekkekakis & Brand, 2019). In addition, students are given emotional support to compensate for the lack of communication in distance learning (Pham et al., 2019). It includes providing summer programs, assisting students in forming learning groups, establishing learning communities, and providing psychological counseling. Emotional support can assist students in resolving various psychological and emotional issues, alleviating mental tension, eradicating loneliness, and boosting self-confidence to promote learning.

6. Conclusion

The "Healthy China 2030" plan outlines health as a prerequisite for promoting the all-around development of the population. Enhancing mental health is crucial to individuals' health, quality of life, and well-being. Physical

activity is one of the effective intervention methods for mental health. The significance of physical activity for mental health is unique and substantial. College students must engage in long-term, conscious, and active online yoga practice to enhance their mental health. During the prevention and control of COVID-19, online yoga exercise positively affects the regulation of college students' tension, anxiety, depression, sleep, and diet, which may be related to changes in yoga postures such as handstand, twist, forward bend, and backbend. Sports activities can reduce anxiety and foster physical and mental health in the home environment. Physical activity significantly affects the anxiety, melancholy, and loneliness of socially isolated individuals. Mental health is positively correlated with physical activity among college students. By engaging in physical activity, college students can effectively regulate their moods and reduce anxiety. Physical activity is one of the best methods for college students to alleviate psychological stress. The longer the duration of exercise, the smaller the stress response, and the more conducive it will be to reducing college students' sense of anxiety and enhancing their mental health.

Under the influence of the COVID-19 pandemic, anxiety, boredom, depression, and tension have increased among adolescents. One of the essential functions of sports is promoting physical and mental health, which is the fitness function (Saputri & Yumarni, 2023). It is concluded that physical activity significantly influences the promotion of adolescents' mental health, which can reduce adolescents' boredom and the risk of depression. It can reduce stress, alleviate anxiety, and enhance adolescents' sleep quality. It can promote adolescents' mental health, cognitive health, thinking, learning, and well-being. Physical and mental health is the premise and foundation for individuals to actualize their life values and an essential guarantee for society's rapid and harmonious development. As the "successor" of the country's future development, their physical and mental health requires that they understand the importance of participating in sports activities and make an effort to exercise. On the other hand, colleges and universities require more physical education, training, and guiding activities.

7. Theoretical and Practical Implications

This research's theoretical foundation is demonstrated empirically, and the study has uncovered significant results. The study has theorized that, from the standpoint of human ethics, there is a positive relationship between sports activities and narrative psychology. However, the study has empirically demonstrated that this relationship is significant and was not revealed by previous research. Therefore, the description of this relationship in the corpus of knowledge contributed to advancing sports activities and narrative psychology-related literature. This study added to the literature that sports activities are necessary for students because, based on their participation in sports, students engage in various actions while maintaining psychological health. Students' performance can be improved through participation in athletics, which must be completed with vigor. The study has added to the literature that concerned ethics play a crucial role in student participation in sports activities. Indeed, without human ethics, the enhancement of student athletics is impossible. Thus, the cavity in the literature is filled. From the perspective of caring ethics, new dimensions of sports activities for students' psychological well-being are added to the body of knowledge.

The findings of this study also led to practical implications. The study has clearly outlined the need to improve sports activities for students in various schools and colleges to enhance their psychological well-being, which aids them in narrative psychology. Students can advance their mental development and productivity through participation in sports activities. Students' performance can be reliably enhanced through participation in appropriate athletic activities. Furthermore, the administration of the schools and colleges must work for the benefit of the students to develop policies that will enable them to work effectively. Their participation in sports determines the reliability of the students' narrative psychology. Thus, a greater emphasis on the students' sports activities can lead to improved narrative psychology performance. Similarly, the concept of compassionate ethics should not be eliminated from the entire procedure, as it also substantially impacts this relationship.

8. Future Directions

Nonetheless, this study found that physical activity promotes the healthy growth of adolescent narrative psychology. In addition, it concluded that physical activity has a significant influence on adolescent mental health, which can reduce adolescent boredom, boredom, and depression risk. In addition, the results demonstrated that it can reduce stress, alleviate anxiety, and enhance adolescents' sleep quality. In addition, according to the research, it can improve adolescents' mental health, cognitive health, thinking, learning, and overall well-being. However, this study's findings have certain limitations that must be investigated in future research. The study examined the relationship between sports activities and narrative psychology from the standpoint of compassionate ethics.

Nonetheless, additional research is required to develop a more complex paradigm for this issue. Future research is needed to ascertain, from the perspective of student health behavior, the relationship between sports activities and narrative psychology. Similarly, students are motivated to determine the relationship between sports activities and narrative psychology from the standpoint of health literacy awareness. Scholars can expand the body of knowledge by pursuing these lines of inquiry.

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