Revista de Psicología del Deporte/Journal of Sport Psychology Vol. 30. n.°4. 2021. pp. 96-104
Universidad de Almería / Universitat Autónoma de Barcelona. ISSN 1132–239X ISSNe 1988–5636

The influence of personal factors on adolescents' physical and mental health: from the perspective of sports commitment

Yulin Yang[1], Yansen Li[1], Jing Yu[2]*

Abstract

The purpose of this study is to examine the determinants of teenagers' physical and mental health via the lens of sports commitment. The survey of 1000 senior high school students revealed that adolescents' stress tolerance varied by gender and grade. Teenagers' physical activity levels, frequency, and duration are largely consistent and reasonable. Physical activity has a major effect on adolescents' stress resistance, mental health, and interpersonal relationships. Through statistical analysis of 930 teenagers, it was determined that 533 people engaged in low physical activity, accounting for 57.4 per cent of the total population. 242 people engaged in moderate physical activity, accounting for 26.1 per cent of the population. 155 people engaged in vigorous physical activity, accounting for 16.5 per cent of the total population. According to statistical analysis of the basic amount of physical activity performed by teenagers, teenagers' amount of physical activity is relatively concentrated between low and moderate levels of physical activity, indicating that teenagers' overall level of physical activity remains stable. Commitment to sports may fully mobilise social support, increase teens' happiness via numerous channels, foster a positive learning and training environment, and bolster supervision and positive psychology cultivation.

Keywords: Aadolescents; Mental health model; Qualitative analysis; Quantitative test

Introduction

Teenagers are vulnerable. Their academic and life pressures are increasing, resulting in interpersonal friction and negative emotions such as jealousy, dissatisfaction, and hatred. Physical activity can help lessen this occurrence. Physical exercise enables young people to improve their overall work ability and mental activity ability, laying the groundwork for the body's ability to adapt to change. Secondly, physical exercise enables teenagers to increase their interpersonal communication opportunities, promotes their social adaptability, and prepares teenagers to deal with all types of setbacks and difficulties in life. Physical activity and health are inextricably linked (Ferschmann et al.; Sims-Gould et al., 2017). Physical inactivity has a direct effect on pupils' physical health.

Increasing students' passion for physical activity has been a major focus of physical education reform. It is necessary to improve teenagers' physical health and participation in physical activities, and to make this the primary objective and fundamental requirement of School Physical Education (Benítez-Sillero et al., 2021; Meyer et al., 2017). Numerous specialists and scholars have discovered that physical exercise is a significant factor affecting teenagers' health. Physical activities encompass a variety of varied and vibrant forms of exercise and sports. Cardiovascular and diabetic disorders are not easily caused by physical activity (Chi et al., 2021; de Figueiredo et al., 2021; McGorry et al., 2022). As a result, physical inactivity can negatively affect adolescents' physical health. Numerous scientists in international sports science and health promotion use physical activity research to investigate and explain the relationship between physical activity, particularly moderate- and high-intensity physical exercise, and physical health. While focusing on teenagers' physical health, schools, families, and society should encourage and support teenagers' participation in physical activities, continuously improve the level of physical activity, incorporate interesting and entertaining physical activities into school physical education and family education, and cultivate teenagers' enthusiasm and interest in physical activities. Encourage youngsters' physical growth and well-being (Felipe et al., 2019). In brief, numerous elements contribute to various issues in teenagers' psychology, life, learning, and interpersonal relationships; resolving these conflicts is a new research area. The current state of physical activity among teenagers will be discussed. The effect of physical activity on teenagers' stress resistance, mental health, and interpersonal relationships will be highlighted for future research giving physical exercise a higher priority. The notion of expectation value is one of the most influential in motivational psychology. It asserts that an individual's motivation to perform particular tasks is contingent upon their expectation of success and the task's value. The more probable an individual believes the objective will be

[1] Physical Education College of ZhouKou Normal University, Henan, 466000Chin
[2] College of Sports Science,Shenyang Normal University, Liaoning, 110000, China
Corresponding Author's Email: yujing_bj@126.com

accomplished, the bigger the incentive value associated with the goal, and the stronger the individual's motivation and level of commitment to completing the activity (Costa et al., 2020; Pan et al., 2021). Geyh et al. (2016) assert that a sense of security is an individual's anticipation of potential danger or risk, represented in feelings of strength/powerlessness, certainty, and control in response to disposal. Additionally, some experts have claimed that security is a personality characteristic. McKenna G discovered that impoverished left-behind children have much worse mental health than non-poor left-behind children. Psychological resilience is critical in regulating and mediating the relationship between life experiences and mental health. There is a complex relationship between life stress and individual health. Individuals can influence how stress events affect their mental health by adjusting certain intermediary aspects such as cognitive evaluation, coping style, and social support (McKenna et al., 2020). Man S S argued that a sense of security is an individual's anticipatory awareness of potential threats or risks, which manifests as a sense of power/powerlessness, certainty, and control when confronted with them. Additionally, some experts have suggested that a sense of security is a personality attribute (Man et al., 2021). Dyck D V argues that an individual's sense of security (or insecurity) is not the consequence of a singular set of inner activities or environmental conditions but rather the outcome of an ever-changing relationship between the individual's subjective world and the environment.

Based on the current research, thoroughly excavate the constituent elements of adolescent mental health (Figure 1 and Figure 2), ensure that the constructed model is consistent with the environment and its characteristics of adolescent mental development, and further SEM test the constructed model (Table 1, Table 2, Table 3, and Table 4), to provide a new theoretical perspective and research basis for the cultivation of adolescent mental health.

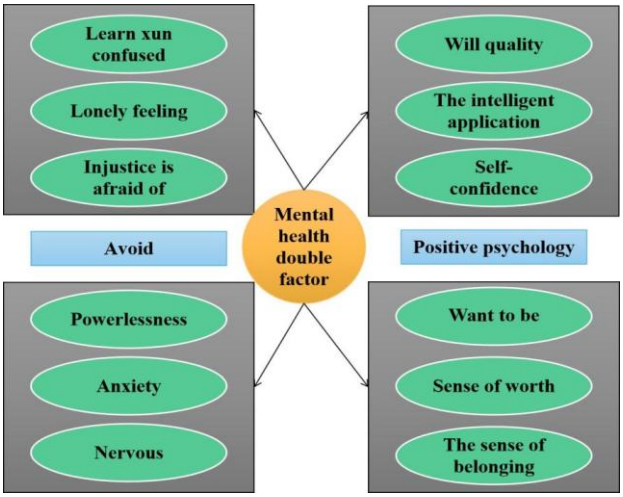

Figure .1 Two factor model of adolescent mental health

Research object and method

Research object

(1) Interview method

The study conducted in-depth interviews with 22 young athletes around a pre-prepared interview outline. There are 18 boys and 4 girls, with an average age of 15.72 years, and training years ranging from 6 months to 3 and a half years. The sports involved are taekwondo, karate, speed skating, wrestling, basketball, judo, hockey, track and field, etc. According to the interviewees' cognitive level and expression ability, the interview will be combined with open and closed inquiry, guided interview, and probing interview, avoiding professional vocabulary as much as possible and adopting colloquial communication. Each interview was completed by two people and lasted 20-40 minutes.

(2) Questionnaire survey

1000 questionnaires were randomly distributed in two local high schools, and 980 questionnaires were recovered, with a recovery rate of 98.0%. There were 930 valid questionnaires, and the effective rate was 93%. The age range was 15-18 years, and the average age was 15.82 ± 1.20. There are 552 boys, accounting for 59.3%, and 378 girls, accounting for 40.6%.

Research methods

In this study, 980 survey reports were analyzed by using physical Exercise Rating Scale, Adolescent Self-Estimated Life Events Scale, Interpersonal Relationship Comprehensive Diagnostic Scale, and College Student Mental Health Scale. Based on the obtained data, systematic statistics and variance analysis were used to explore the status quo of physical exercise, life resistance to stress, mental health and overall characteristics, and changes in adolescents' interpersonal relationships (Man et al., 2021).

Mathematical statistics

The survey data are statistically analyzed through SPSS22.0 and AMOS23.0. The reliability of the adolescent mental health questionnaire was tested by α coefficient, SEM carried out confirmatory factor analysis, the appropriateness of construction validity of the model constructed by qualitative research was tested, and the differential validity was tested by AVE method.

Research results and analysis

Current situation and analysis of teenagers' physical exercise

Statistical analysis on the current situation of teenagers' physical exercise intensity

According to the grounded theory, 292 nodes, 42 open codes, 15 correlation codes and 4 core codes were formed in the interview text. Environmental mal adjustment, emotional experience of competition and training, subjective happiness feelings, and positive psychological characteristics were the main factors that constituted the mental health of adolescent athletes.

Through the statistics of 930 valid survey reports, the basic situation of teenagers' physical exercise intensity is understood. See Table 1 for details.

Table 1

Physical exercise intensity of teenagers

Exercise intensity	Frequency	Percentage	Effective percentage	Cumulative percentage
Light physical exercise	212	22.8	22.8	45.6
Low intensity physical exercise	172	18.5	18.5	37
Moderate intensity physical exercise	134	14.5	14.5	29
High intensity physical exercise	397	42.6	42.6	85.2
High intensity physical exercise	15	1.6	1.6	100
Total	930	100	100	

Through the statistical analysis of 930 teenagers, 212 took slight physical exercise, accounting for 22.7% of the total. The number of low-intensity physical exercises was 172, accounting for 18.5% of the total. The moderate intensity physical exercise was 134, accounting for 14.4% of the total. The number of high-intensity physical exercise was 397, accounting for 42.6% of the total. The number of extremely high-intensity physical exercise is 1.6%, accounting for 1.6% of the total. The basic sports intensity of teenagers is statistically developed, and the number of Teenagers Participating in high-intensity physical exercise is the largest. Followed by light physical exercise.

Statistical analysis on the current situation of teenagers' physical exercise time

Through the statistics of 930 valid survey reports, the basic situation of teenagers' physical exercise time is understood. See Table 2:

Table 2

Physical exercise time of teenagers

Time	Number of people	Percentage	Effective percentage	Cumulative percentage
Under 10min	126	13.5	13.5	27
11min~20min	187	20.1	20.1	40.2
21min~30min	468	50.3	50.3	100.6
30min~59min	115	12.3	12.3	24.6
Over 60min	34	3.8	3.8	7.6
Total	930	100	100	

In a statistical review of 930 youths, it was discovered that 126 of them engaged in physical activity for less than ten minutes, accounting for 13.5 per cent of the total. 187 people spend between 11 and 20 minutes exercising, accounting for 20.1 per cent of the total. Between 21 and 30 minutes of physical activity, 468 persons participated, accounting for 50.3 per cent of the total. The number of those who spent between 30 and 59 minutes exercising was 115, accounting for 12.3 per cent of the total. 34 persons exercised for more than an hour, accounting for 3.8 per cent of the total. According to statistics on teens' fundamental physical activity time, it is determined that teenagers' physical activity time is focused between 20 and 60 minutes. In comparison, the sports schedule for teens' physical activity is more fair.

Statistical analysis on the current situation of teenagers' physical exercise frequency

Through the statistics of the obtained data, we can understand the basic situation of teenagers' physical exercise frequency. See Table 3 for details:

Table3

Physical exercise frequency of teenagers

Frequency	Number of people	Percentage	Effective percentage	Cumulative percentage
Less than once a month	46	5	5	10
Two to three times a month	115	12.4	12.4	24.8
Once or twice a week	473	50.9	50.9	101.8
Three to five times a week	217	23.4	23.4	46.8
About once a day	79	8.3	8.3	16.7
Total	930	100	100	

The term "physical exercise frequency" refers to the amount of physical activity kids engage in independently of classroom physical education. According to the report, 46 per cent of respondents exercise less than once a month. 115 persons exercise twice or three times a month, accounting for 12.4% of the population. 473 persons exercised once and twice a week, accounting for 50.9 per cent of the total. 217 individuals exercised three to five times each week, accounting for 23.4% of the total. 79 persons exercise once a day, accounting for 8.3 per cent of the population. According to statistics on teens' basic exercise frequency, it is determined that teenagers' basic exercise frequency is Physical activity should be limited to once or twice a week, followed by three to five times a week. Teenagers' physical activity is more reasonable in terms of frequency of exercise.

Statistical analysis on the current situation of teenagers' physical exercise

Through the statistics of the obtained data, we can understand the basic situation of teenagers' physical exercise. See Table 4 for the specific situation.

Table 4

Physical exercise of teenagers

Exercise intensity	Number of people	Percentage	Effective percentage
Low physical exercise	533	57.4	57.4
Moderate physical exercise	242	26.1	26.1
High physical exercise	155	16.5	16.5
Total	930	100	100

Through statistical examination of 930 youths, it was shown that 533 had insufficient physical activity, accounting for 57.4 per cent of the total. 242 people engage in moderate physical activity, accounting for 26.1 per cent of the total. There are 155 people with a high level of physical activity, accounting for 16.5 per cent of the total. According to statistical analysis of teenagers' basic exercise volumes, the amount of teenagers participating in physical activity is relatively concentrated between low and medium physical activity volumes, indicating that teenagers' overall physical activity level remains stable to a certain extent.

Current situation and analysis of teenagers' life stress resistance, interpersonal relationship and mental health

Differences in life stress resistance, interpersonal relationship and mental health of adolescents of different genders

The variations in life stress tolerance, interpersonal relationships, and mental health of teenagers of various genders were analysed using an independent sample t-test. To aid detection, stress tolerance will be employed rather than life stress tolerance. There were no statistically significant differences in interpersonal relationships or mental health between male and female adolescents ($P > 0.05$). There were statistically significant variations in stress tolerance between male and female adolescents (P 0.05). As can be seen, the differences in mental health and interpersonal communication between adolescents of different genders are relatively small during the adolescent stage, indicating that there is no discernible difference in adolescents' mental health between genders and further demonstrating that adolescents have a healthy physical and mental development in a supportive environment. Teenagers who develop psychological problems can eventually modify and adopt more appropriate problem-solving approaches. Simultaneously, there is no discernible gender difference in adolescents' interpersonal communication. This study's samples are more comparable in family features and growth environment. There are considerable disparities in stress tolerance amongst teenagers of various genders. Consider the reasons. In adolescence, male and female pupils have distinct family upbringing methods, distinct family hopes, distinct classmate interactions, and distinct personalities and coping styles. Adolescents of different genders exhibit varying levels of tolerance for life pressure, indicating that life stress resistance is related to teens' personality features, growth environment, and coping techniques. In the future, characteristics of adolescents can be examined about a variety of social variables (Kieras et al., 2020).

Disparities in teenagers' resilience to life stress, interpersonal relationships, and mental health across grades

ANOVA evaluated the sample data to determine the differences in life stress tolerance, interpersonal relationships, mental health, and physical activity between the sexes. To facilitate data processing, stress tolerance will be employed instead of life stress tolerance. Through univariate analysis of the ASLES, interpersonal

connection, and MHI-5 test results of teenagers in different grades, it was determined that there is no significant difference in mental health or interpersonal relationship between adolescents in different grades (P > 0.05). There are substantial differences in stress tolerance between teenagers of different grades, P 0.05. Senior two and senior three students, in particular, have a greater tolerance for stress than senior one students, which is reflected in the fact that senior students have a greater tolerance for stress than junior students.

Investigation and Analysis on the relationship between physical exercise and teenagers' life stress resistance, interpersonal relationship and mental health

Discussion on the differences of life stress resistance, interpersonal relationship and mental health among adolescents with different exercise intensity

We can further understand whether there are equivalent variances in life pressure resistance, interpersonal relationships, and mental health when physical exercise intensity varies. To facilitate data processing, stress tolerance will be employed instead of life stress tolerance. We know that there is no significant difference in teenagers' stress tolerance when physical exercise intensity is varied (P > 0.05). There were, however, significant effects in interpersonal relationships and mental health when the intensity was varied (P 0.05). Teenagers' mental health varies according to the level of physical exercise, and there are variances of diverse degrees. Simultaneously, several post-test results indicate that, when teenagers engage in moderate to vigorous physical activity, their mental health level is much greater than adolescents who engage in light physical activity. Teenagers also exhibit changes in interpersonal communication when they engage in varying degrees of physical activity. According to interpersonal communication test results, it is discovered that when teenagers engage in different levels of physical activity, their mental health is significantly better than when they engage in medium or high levels of physical activity (Gonçalves et al., 2016).

Disparities in life stress resistance, interpersonal relationships, and mental health among teenagers who receive varying amounts of exercise

By performing a single component analysis on the test findings, we may determine whether teenagers exhibit commensurate changes in their resistance to life stress, interpersonal relationships, and mental health when exposed to varying quantities of physical activity. To make data processing easier, we shall employ stress tolerance rather than life stress resistance. The findings are depicted in Figure 2:

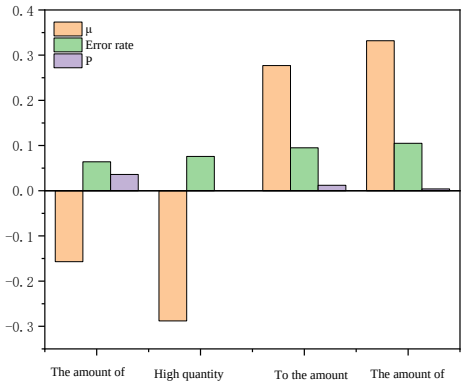

Figure .2 Post hoc multiple testof LSD in adolescents under different physical exercise quantities

We can deduce from the test results that there are varying degrees of changes in teenagers' mental health state and stress tolerance when they engage in varying amounts of exercise. The test reveals that teens who engage in moderate to vigorous physical activity have considerably better mental health than teenagers who engage in little physical activity (P 0.05). The stress tolerance of adolescents who engaged in vigorous physical activity was substantially greater than that of adolescents who engaged in moderate to light physical activity (P 0.05). There is no discernible difference in interpersonal relationships when physical exercise is performed at varying intensities. The findings of this study indicated a positive link between physical activity and adolescents' stress tolerance (P 0.05). It was favourably connected with psychological well-being (P 0.05). There was no link between interpersonal relationships and self-esteem (P > 0.05). This finding indicates that as the pressures of adolescence increase, appropriate physical exercise can effectively adjust their mental health and stress tolerance to a certain extent, allowing them to continuously vent their negative emotions and relieve the pressure, thereby improving their mental health, allowing them to face life positively, and increasing their ability to withstand pressure.

Discussion

Environmental determinism is a concept in behaviourist psychology that asserts that an individual's psychological state is not an autonomous vacuum existence, but rather a product of the environment, influenced by both the natural and social environments. Ecosystem theory highlights microsystems' relevance, such as the school environment, teacher-student connection, and partnership in adolescent mental health. A positive campus climate and a positive teacher-student interaction

can help students improve their mental health and prevent risky behaviour. Simultaneously, some surveys indicate that "bullying" is extremely prevalent among teenagers, and those bullied have a variety of physical and psychological symptoms. Teenagers are unable to escape their social environment. Simultaneously, they must contend with their particular developmental environment, including tedious training, tough and merciless competition, pre-competition anxiety, sports injury, and physical and mental exhaustion. This environment is distinct from the general population, with more intricate adaptations to the environment and a greater impact on mental health (Donnelly et al., 2016). While the environment's influence on people's psychology cannot be overlooked, the management and release of positive psychological states in response to unpleasant emotions cannot be neglected during the adolescent era. Positive psychology and subjective well-being are two markers. According to social support theory, individuals achieve happiness when concerned, loved, and respected in social relationships. Parent-child relationships and peer support are particularly critical for the psychological well-being of teenagers. Emotional support can assist the mind during a period of dependency and exclusion, opening and closing, relieving tension, reducing psychological stress responses, and promoting and enhancing mental health. Along with social support and the external environment, internal elements (personality, temperament, and self-awareness, for example) contribute to teenagers' mental health. Internal elements impacting individual psychology are determined by genetics, the fundamental and constant psychological feature shared by all teenagers and intimately connected to people's social adaptability and creative behaviours. Psychological qualities directly affect an individual's mental health, empirical study indicates. Teenagers' initiative, temperament, and subjective consciousness frequently have a direct and significant impact on their performance in competition and training and their interpersonal and coping skills. To continue promoting the development of teenagers' physical quality, mental health, and interpersonal relationships, relevant departments should focus on enhancing teenagers' physical exercise quality and continually increasing their understanding of the benefits of physical activity. It is suggested that high schools continually improve their quality management system for physical education classroom instruction, equip PE equipment to meet the needs of teenagers, develop a corresponding teacher training system and assessment standards, and further ensure the perfection of teenagers' physical exercise. Simultaneously, teachers are urged to prioritize the implementation of diverse physical education techniques, foster students' interest in a variety of physical activities, and promote students' conception of lifelong physical activity. Local sports departments should prioritize youth sports development, collaborate actively with school sports programmes, establish various sports associations and clubs, strengthen guidance and organisation of sports activities for rural left-behind youth students, and encourage rural left-behind youth students to participate actively in sports activities. Additionally, we should continue to strengthen adolescents' ideological education, utilising social practise activities, allowing students to fully participate in the process of social life, and allowing adolescents to extract effective time from subject learning to alleviate fatigue, improve their ability to resist pressure, recognise their deficiencies, and actively pursue self-improvement. Schools at all levels should place a premium on adhering to the applicable international curriculum requirements, ensuring the quality of physical education sessions, and providing adequate time for physical activity for children and adolescents. Among them are at least three hours of physical education per week for junior high school students; and at least two hours per week for high school students. In the absence of PHYSICAL education, the school can organise students' physical exercise activities after class; the students' current situation should determine the duration and frequency of physical exercise. These physical exercise teaching activities should be integrated into the teaching plan. Simultaneously, actively promote large recess sports activities. Each morning between classes, about 20 minutes of unified sports activities; organise students to participate in radio gymnastics and extracurricular sports activities; for boarding schools, we should emphasise morning exercises. Additionally, the school should prioritise the management of the physical education curriculum and aggressively pursue curriculum reform, incorporating corresponding extracurricular activities into the daily teaching plan, ensuring that teens engage in physical activity at least three times a week. Administrative departments of education at all levels should advocate for the specific requirements of exercising one hour daily and do their best to implement them, organise students to engage in physical activity appropriate to their locale, and provide targeted guidance and support for disabled teenagers' physical activity activities. It is vital to strengthen the teacher preparation programme, recruit and retain strong physical education teachers, and retrain physical education instructors to meet the objectives of opening physical education and developing after-school physical activity. In order to promote teens' physical activity levels, the government,

schools, and society should collaborate to control teenagers' physical activity. Government administration departments at all levels should prioritize youth physical activity programmes, recognise the value of physical activity, and prioritise its work. Simultaneously, competent departments at all levels should place a premium on the development of sports activities and the provision of equipment for community teenagers and on diversifying the types of family sports activities and establishing a pattern of joint sports activities involving schools and society, and families. According to available statistics, family is the primary factor influencing teenagers' participation in physical activity. As a result, governments at all levels and communities should actively promote and continuously publicise the concept of health-first physical activity, develop an appropriate concept of education and achievement beginning in the adolescent years, and focus on developing teenagers' lifelong exercise consciousness.

Additionally, emphasis should be devoted to developing teens' daily routines and civilised and healthy life patterns, and both parents and children should be actively encouraged to participate in sports. According to some studies, a sense of security is a mental resource that can help people increase their information processing ability and stimulus response ability, mobilise their social support system, and achieve a greater sense of satisfaction. The sense of security refers to an individual's confidence and control over how they respond to environmental stimuli. This condition of psychological activity remains and eventually develops into a personality attribute characterised by a sense of confidence, security, and freedom from fear and anxiety. It is precisely because of the sense of security features that it has become the most influential and determinant factor impacting and deciding individual mental health, and is frequently used interchangeably with mental health.

Conclusion

Physical activity is critical for improving adolescent stress resistance, mental health, and interpersonal relationships. Teenagers can enhance their overall body function and mental activity capacity through physical activity and build the groundwork for improving their stress resistance. Second, create more interpersonal possibilities for teens through physical activity, stimulate the development of teenagers' social adaptation, prepare teenagers to deal with a variety of setbacks and challenges in life, and help them develop an autonomous personality. Finally, physical activity can aid in the development of teenagers' mental health and help them establish a positive attitude toward life. Internal elements impacting individual psychology are determined by genetics, the fundamental and constant psychological feature shared by all teenagers and intimately connected to people's social adaptability and creative behaviours. Psychological qualities directly affect an individual's mental health, empirical study indicates. Teenagers' initiative, temperament, and subjective consciousness frequently have a direct and significant impact on their performance in competition and training and their interpersonal and coping skills. As a result, we should prioritise exploration and research in this area. As a result, it is advised that a psychological training platform tailored to the psychological features of teenagers be developed, as well as measures to avoid and educate adolescents about the predictable external environment. Fully mobilise social support, increase young athletes' enjoyment via numerous channels, foster a positive learning and training environment, and strengthen guidance and positive psychology cultivation.

Implementations

Implementations in Academics

This study contributes to the literature by addressing the role of sports management in adolescents' mental health. It was previously unconsidered that a dedication to sports could improve adolescent physical and mental health, particularly among school-aged adolescents. In this way, this study demonstrates how teenagers' mental health can be improved through involvement in physical activities related to the supports, because when they engage in sports commitment activities, they become mobilised and experience happiness through a learning environment and life training. Additionally, this study shows that positive psychology can be developed by instilling a strong dedication in youngsters to sports, hence improving their living standards. This study's contribution is critical for future research to understand the relationship between adolescence and commitment better.

Implementations in Practice

Additionally, this study presents practical implementations for the development of positive psychology in adolescents, as it is critical for adolescents to build their mental capacity for comprehension and creativity. Adolescence's responsibility and commitment to support can be improved in this way if they receive adequate mentorship and are required to participate physically and mentally in sports to develop their positive psychology. Additionally, sports activities are critical for mental health development, as sports activities are beneficial for mental health growth. After all, youths who do not participate in sporting activities do not receive the

mental relaxation that teens who participate in practical activities do. In this way, this study demonstrates that students of teenagers should be encouraged to participate in supportive activities, as they can easily acquire positive psychology and play a critical role in society due to their development. Additionally, the more mental relaxation supplied to teenagers, the more their mental health will develop and they will be able to live a normal life.

Future Perspectives

This study demonstrates that future researchers should focus on the impact of exercise and creative training in developing the teenage mind and preparing them to live a normal life in society. This study should be analysed to establish a relationship between the variables for future research.

Acknowledgements

The work was supported by the National Social Science Found of China (Grant: 21BTY096).

References

Benítez-Sillero, J. D. D., Martínez-Aranda, L. M., Sanz-Matesanz, M., & Domínguez-Escribano, M. (2021). Determining factors of psychological performance and differences among age categories in youth football players. *Sustainability, 13*(14), 7713. https://doi.org/10.3390/su13147713

Chi, X., Liang, K., Chen, S.-T., Huang, Q., Huang, L., Yu, Q., . . . Hossain, M. M. (2021). Mental health problems among Chinese adolescents during the COVID-19: The importance of nutrition and physical activity. *International Journal of Clinical and Health Psychology, 21*(3), 100218. https://doi.org/10.1016/j.ijchp.2020.100218

Costa, A. A. M., Silva, L. A. P., Aguiar, Y. P. C., Ramos, F. B. A., de Sousa Neto, A. F., & Valadares, D. C. G. (2020). The influence of personal factors on errors when interacting with a critical system. *IEEE Latin America Transactions, 18*(05), 931-937. https://doi.org/10.1109/TLA.2020.9082922

de Figueiredo, C. S., Sandre, P. C., Portugal, L. C. L., Mázala-de-Oliveira, T., da Silva Chagas, L., Raony, Í., . . . Bomfim, P. O.-S. (2021). COVID-19 pandemic impact on children and adolescents' mental health: Biological, environmental, and social factors. *Progress in Neuro-Psychopharmacology and Biological Psychiatry, 106*, 110171. https://doi.org/10.1016/j.pnpbp.2020.110171

Donnelly, L. R., Clarke, L. H., Phinney, A., & MacEntee, M. I. (2016). The impact of oral health on body image and social interactions among elders in long-term care. *Gerodontology, 33*(4), 480-489. https://onlinelibrary.wiley.com/doi/abs/10.1111/ger.12187

Felipe, J., Rodrigues, M. V. P., Ferreira, A. D., Fonseca, E. S., Ribeiro, G. G. d. S., & Arana, A. R. A. (2019). Actividad física y ambiente: la influencia de los parques verdes urbanos en la salud. *Revista Brasileira de Medicina do Esporte, 25*(4), 305-309. https://doi.org/10.1590/1517-869220192504187662

Ferschmann, L., Bos, M., Herting, M., Mills, K. L., & Tamnes, C. K. Contextualizing adolescent structural brain development. https://doi.org/10.31234/osf.io/w8jq6

Geyh, S., Kunz, S., Müller, R., & Peter, C. (2016). Describing functioning and health after spinal cord injury in the light of psychological-personal factors. *Journal of rehabilitation medicine, 48*(2), 219-234. https://doi.org/10.2340/16501977-2027

Gonçalves, L. C., Endrass, J., Rossegger, A., & Dirkzwager, A. J. (2016). A longitudinal study of mental health symptoms in young prisoners: exploring the influence of personal factors and the correctional climate. *BMC psychiatry, 16*(1), 1-11. https://doi.org/10.1186/s12888-016-0803-z

Kieras, W. S., do Amaral Machado, S., Pelissari, A. L., Cysneiros, V. C., & da Silva, S. A. (2020). INFLUENCE OF THE LAURACEAE FAMILY ON THE DYNAMICS OF A MIXED OMBROPHILOUS FOREST REMNANT. *Floresta, 51*(1), 164-173. http://dx.doi.org/10.5380/rf.v51i1.67629

Man, S. S., Chan, A. H. S., Alabdulkarim, S., & Zhang, T. (2021). The effect of personal and organizational factors on the risk-taking behavior of Hong Kong construction workers. *Safety science, 136*, 105155. https://doi.org/10.1016/j.ssci.2020.105155

McGorry, P. D., Mei, C., Chanen, A., Hodges, C., Alvarez-Jimenez, M., & Killackey, E. (2022). Designing and scaling up integrated youth mental health care. *World Psychiatry, 21*(1), 61-76. https://doi.org/10.1002/wps.20938

McKenna, G., Rogers, A., Walker, S., & Pope, C. (2020). The influence of personal communities in understanding avoidable emergency department attendance: qualitative study. *BMC health services research, 20*(1), 1-12. https://doi.org/10.1186/s12913-020-05705-5

Meyer, S. R., Steinhaus, M., Bangirana, C., Onyango-Mangen, P., & Stark, L. (2017). The influence of caregiver depression on adolescent mental health outcomes: findings from refugee settlements in Uganda. *BMC psychiatry, 17*(1), 1-10. https://doi.org/10.1186/s12888-017-1566-x

Pan, Y., Yang, Z., Han, X., & Qi, S. (2021). Family functioning and mental health among secondary vocational students during the COVID-19 epidemic: A moderated mediation model. *Personality and Individual Differences, 171*, 110490. https://doi.org/10.1016/j.paid.2020.110490

Sims-Gould, J., Vazirian, S., Li, N., Remick, R., & Khan, K. (2017). Jump step-a community based participatory approach to physical activity & mental wellness. *BMC psychiatry, 17*(1), 1-8. https://doi.org/10.1186/s12888-017-1476-y