Effects of sports training and psychological training on employees' psychological stress

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Abstract

Physical exercise and psychological training can offer additional interpersonal possibilities for college students, allowing them to actively participate in activities while also enhancing their interpersonal skills, mood, and life outlook. This study aims to examine the effect of sports and psychological training on the psychological stress of Chinese employees. In this study, 110 convenient sampling techniques were used to select 115 male university volunteers in public physical education as experimental participants, who were then randomly divided into experimental class and control class, and the psychological pressure and changes in various dimensions were evaluated using the natural experiment method. Using SPSS21.0, mathematical-statistical analysis was done on the recovered accurate scales. After 12 weeks of psychological intervention, the psychological training group had significant differences in the dimensions of life ($P = 0.030$), development ($P = 0.013$) and social ($P = 0.016$) ($P < 0.05$), family ($P = 0.000$), life events ($P = 0.001$) and total score ($P = 0.002$) ($P < 0.01$). The exercise intensity was controlled within the range of medium and small intensity and did not receive psychological training, but some dimensions had positive changes. Psychological training can significantly reduce the psychological pressure of the development dimension. Moderate intensity exercise combined with psychological training is beneficial for coping with psychological pressure, and its positive regulation effect is significantly superior to physical exercise or psychological training alone. Therefore, the total impact of physical exercise combined with psychological training intervention is still evident and should be promoted.

Keywords: Psychological training; Psychological pressure; Sports training; Experimental method

Introduction

Psychological pressure is a state of physical and mental strain generated by exposure to external stimuli. Moderate pressure can boost people's development. Too much or too little psychological pressure will affect the individual or the external environment. The Internet keyword "Alexander" and the recent rise of the circle of friends "I was so stupid as a youngster, I was looking forward to growing up" indicate that the pressure on modern people is rising as quickly as housing prices. Appropriate pressure can motivate people in their professional and daily lives. Too much or too little pressure will disrupt a person's study, career, and life and harm others or the larger community (Dusenberry & Robinson, 2020). In recent years, the incidents of self-mutilation and suicide by college students due to various psychological barriers and mental disorders have been frightening. They have even harmed society due to bad psychology. Unfortunately, the state places such a high priority on the mental health of young college students. In the medium and long-term youth development plan (2016-2025) released and enacted on April 13, 2017, it is stated that young people are the new driving force and pillar of national economic and social growth. Strengthen mental health education and services for young, focus on bolstering humanistic care and psychological counseling for youth, encourage youth to be self-confident, rational, calm, and optimistic, and nurture healthy psychological and will qualities (Yu, Lin, & Wang, 2021). According to the poll, both inside and outside of China, college students have a high incidence of psychiatric disorders, ranging from 10 to 30 percent. The physical and mental health of college students will have a significant effect on the enhancement of the nation's overall quality and comprehensive strength. The mental health of college students mental health concerns society, schools, families, and the psychological community. Scholars at home and abroad have taken a keen interest in its studies. Psychological stress, often known as "psychological stress," is a form of mental and physical strain that typically manifests through various psychological and bodily reactions when a person perceives or recognizes that his environmental needs are vital and difficult to meet. In 2018, the Party group of the Ministry of education of the Chinese Communist Party issued the guiding outline of mental health education for college students. It takes promoting the coordinated development of students' mental health, ideological and moral quality, and scientific and cultural quality as its guiding ideology. It aims to increase students' mental health awareness and improve their mental health (Ren et al., 2021). Much work must be done to ensure the healthy

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growth of college students in this period in which youth can choose the future. Physical exercise and psychological training can offer additional interpersonal possibilities for college students, allowing them to actively participate in activities while also enhancing their interpersonal skills, mood, and life outlook.

According to the literature, many studies are undertaken on the psychological stress of employees (Khliefat et al., 2021; Tulucu, Anasori, & Kinali Madanoglu, 2022; Varanoske et al., 2022). Several studies identified various psychological stress-inducing elements and proposed a strategy to reduce psychological stress (Nawab et al., 2018). However, psychological stress is quite uncommon in China's educational institutions. Significantly, psychological stress is uncommon at Chinese colleges and is one of the important concerns facing institutions. Thus, the current study identified the most understudied area of the literature and contributed to it.

Similarly, the current study highlighted the significant relationship between sports training and psychological training, which is vital in promoting activities that can reduce psychological stress among employees. The relationship between sports and psychological training has rarely been examined in prior research. Consequently, this study has both theoretical and practical value (Dueñas et al., 2020).

Literature Review

E. Janeczko, professor of modern psychology, says, "A person experiences stress when they are in a risky position and cannot minimize the threat or get rid of it quickly. These sensations, which frequently persist as a result of certain life experiences, will eventually turn into personal life stress " (Janeczko et al., 2020). Professor Pibil, J. believes in psychology that "the term stress generally has three meanings: one is the stressor, which refers to the threatening stimulus existing in reality; the second is the stress response, which refers to people's response to stress events; and the third is the sense of stress, which is a repressive subjective feeling caused by a threatening stimulus" (Přibil, Přibilová, & Frollo, 2020). Professor Wang, P. argues in "mental stress, coping and health: clinical psychology of stress and coping" that "psychological stress, also known as 'psychological stress,' is a state of physical and psychological tension that tends to be expressed through a variety of psychological and physiological reactions when a person feels or realizes that they are facing important and difficult environmental demands" (Wang, 2021). J. Dan argues that stress is a requirement from the outside world that exceeds the capacity of the individual, social system, or body organization system to solve or cope. When the individual detects or evaluates a threat, they will be unable to deal with or adapt to the demand (Dan, Zheng, & Hu, 2022). Psychological stress, also known as psychological stress or psychological tension, is a state of physical and mental tension that individuals are forced to adapt to because their coping ability cannot meet the objective requirements under the stimulation of their internal and external environment (Xu, 2021). Zhang et al. (2021) believes that psychological stress is a full psychological state of continual tension generated by an individual's actual sentiments in response to threatening stimuli or the reflection of events, i.e., it is caused by stressors and formed by three senses of stress and reaction. The "psychological stress level measurement questionnaire (PSTRT)" by Yu and Qi (2020). is a psychological scale for measuring people's real-time psychological condition, or the level of psychological stress at the current time. There are 50 questions on the scale, and the participants have 10 minutes to complete them. Each question has five degrees, each equal to 1 to 5 points. Specific scoring criteria are as follows: if the overall score is below 43, it indicates low pressure - the absence of moderate excitement in life. If the overall score falls between 43 and 65, it indicates moderate blood pressure, which poses no health risk. If the overall score exceeds 65, pressure management is required due to high pressure. The "College Students' psychological stress scale" developed by Li and Li (2020) as a result of the Tenth Five-Year Plan's priority project for national educational science may successfully measure the psychological stress level of college students. The scale comprises two subscales with a total of eleven dimensions. The scale uses the 5-point Likert scoring approach; each question is worth between 1 and 5 points. The higher the scale score, the greater the individual's pressure. The research conducted by Xu (2021) describes the use of randomized controlled trials to implement culturally tailored therapies. Participants who match the eligibility criteria (mild to moderate depression symptoms) will be randomly assigned to either an active treatment group or a waiting list control group. Operational conditions will include seven weekly Internet modules to give cognitive behavioral therapy (ICBT) space for patients suffering from depression and post-conference feedback assistance. The analysis will be based on the intention to treat; the project's purpose is to develop a theoretically sound method for culturally adapting Internet-based therapies for mental health issues. Fitasov et al. (2022) concluded in his study that there are considerable disparities between poor and non-poor students regarding psychological stress and self-acceptance. There are no significant gender variations in

self-acceptance. However, there are substantial gender disparities in discipline. Self-acceptance reduces when psychological stress increases, which is inversely connected with self-esteem. Reggiani and Donati (2020) selected 121 male volunteers from an elective first-year basketball course as the research subject. They conducted natural trials with varying frequencies and activity intensities for 12 weeks. Continuous moderate-intensity basketball exercise can effectively reduce the psychological stress level of athletes, and moderate-intensity basketball exercise combined with psychological training is conducive to athletes coping with psychological stress. Its positive mediation effect is greater than a single basketball exercise or psychological training. In Duan et al. (2021) study, 36 undergraduate students majoring in performance at the Jilin Institute of Physical Education were chosen as the research object, and an 8-week yoga instruction experiment was conducted. College students majoring in performance were asked to complete a mood state scale before and after the trial. It was established that Yoga had a clear calming effect on their psychological pressure. However, different students will experience various effects. The damage induced by prolonged pressure is depicted in Figure 1.

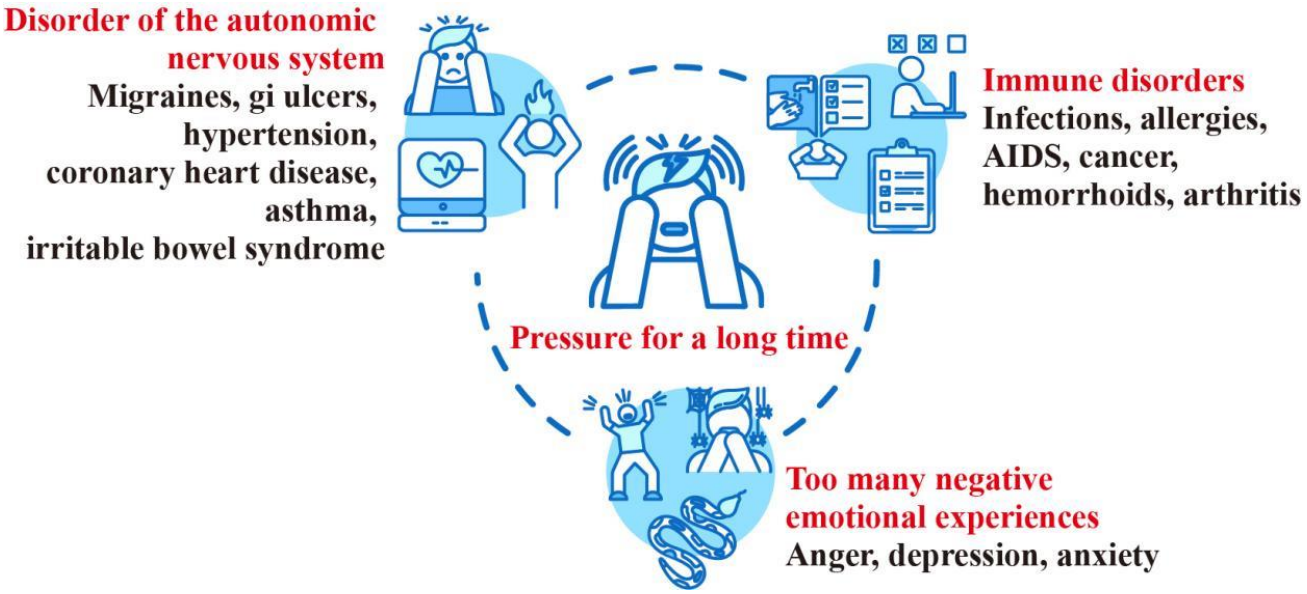

Figure. 1 Hazards caused by long-term pressure

In recent years, more studies have focused on psychological stress, primarily through psychological counseling or psychotherapy. In contrast, physical exercise and psychological training have been involved in preventing psychological stress among college students. However, most of these studies remain at the level of empirical description. According to existing research, varying sports, sports duration, and sports intensity have different effects on the body's response to psychological stress. The more consistent conclusion is that moderate-intensity physical exercise can effectively mitigate the effects of chronic psychological stress and acute psychological stress on the body's psychological, neurological, and immune function, as well as enhance the body's capacity to deal with psychological stress (Lin et al., 2021). Psychological training over some time has a substantial impact on Improving College Students' mental health levels, as well as on improving college students' psychological quality, adaptability, interpersonal relationships, emotion regulation, and self-improvement (Bernátová et al., 2020). Wang (2021) believe that the pressure of the outside world exceeds the capacity of the individual, the social system, and the bodily tissue system to resolve or adapt to it. This occurs when people cannot alter their needs in response to a perceived or evaluated threat (Lin et al., 2021).

A time of psychological training positively impacts the mental health of college students, as well as their psychological health, flexibility, interpersonal relationships, emotional control, and steady self-improvement.

In conclusion, physical exercise and psychological training each have a favorable role in psychological stress. Still, no research has been conducted on the combined effect of physical exercise and psychological training on psychological stress. This research is founded on the cutting-edge developments of positive psychology and sports psychology. Based on a summary and analysis of previous research findings, this study aims to investigate the effect of psychological pressure on medium-intensity

basketball exercise and psychological training and test intervention strategies conducive to promoting the mental health of first-year college students. It has theoretical and practical significance for advancing the fields of sports psychology and development psychology, as well as for advancing college sports reform (Zhuo, Tao, & Zhang, 2020).

Methodology

Research object

This study used the method of convenient sampling to recruit male volunteers from a public physical education class as experimental participants and randomly divided them into experimental and control groups. Due to the lengthy duration of the experiment and the loss of subjects during the period, the final subjects consisted of 20 in the control group, 30 in the medium-intensity basketball exercise group, 25 in the psychological training group, and 40 in the basketball exercise combined with the psychological training group, a total of 115 healthy individuals.

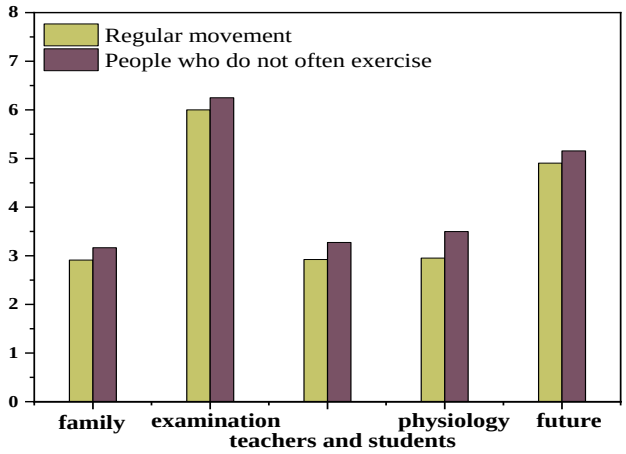

Figure. 2 Effects of exercise and infrequent exercise on many aspects

Figure 2 demonstrates that sports play a positive impact in easing and alleviating psychological pressure among adolescents. All 115 participants in the control group, the medium intensity basketball exercise group, the psychological training group, and the basketball exercise and psychological training group were healthy.

Research methods

Experimental design

The natural experimental procedure of inter-group and intra-group pre-post tests was applied between the experimental and control groups. The duration of the experiment was twelve weeks. Each experimental group received a basketball exercise intervention, a psychological training intervention, or a combination of basketball exercise and psychological training. At the same time, the control class was conducted according to the physical education curriculum. During the experiment, each basketball workout lasted 45 minutes. Basketball exercise group and basketball exercise coupled with psychological training group (hence referred to as "mixed group") exercise three times a week at a moderate level (heart rate is controlled between 130 and 150 beats per minute). Four students are randomly selected from each group to record their heart rate every five minutes using a polar heart rate telemeter. The frequency of physical activity in both the control and psychological training groups was twice weekly, and the intensity control was not implemented.

During the trial, all individuals were obliged to refrain from engaging in additional physical activities. The psychological training group and the combined group participated in group psychological training once a week for 45 minutes. According to the literature, questionnaires, and interviews, the psychological training participants carefully screened the collected problems of psychological stress among college guys. The objectives of group psychological training are as follows: to help members learn new behaviors; to change maladaptive behavior; to consolidate new behaviors through practice; to establish a positive interpersonal attitude and to learn the correct method of communication; to pay attention to the process of group development and to cultivate teamwork ability; to guide members to observe and improve their behavior, to learn benign thinking, and to develop good cognition; to pay attention to emotional experiences; and to help members observe and improve their behavior, to learn benign thinking, and to develop reasonably (Seffernick & Lindert, 2020).

The experimental design incorporates training in self-awareness, emotional self-regulation, interpersonal skills, and other themes. Using the specially allotted classroom teaching time, teachers' explanation, scenario simulation exercise, role play, experience sharing, discussion, and Q & A are used, along with the combination of group counseling and individual consultation, group discussion and sharing feelings, teacher teaching and students' self-study, experience exchange, and simulation exercise, and Q & A via the network (Yu et al., 2020). After each psychological training, offer extracurricular assignments to assess the students' mastery of psychological abilities and conduct situation-specific individual training and counseling. The same teacher instructs all classes in psychological training.

Measuring method

Chinese College Students Psychological Stress Scale was used to quantify college students' psychological stress (CCSPSS). According to the stress-related activity fields, the scale is divided into five subscales: learning, life, social interaction, development, and family. Each subscale's

score equals the total of the item scores within that subscale. The total psychological stress score equals the sum of all scores. The measure "possesses good psychometric properties, including test-retest reliability, internal consistency, content validity, and criterion validity. It can therefore be used to assess the psychological stress level of Chinese college students over time." This experiment employs group psychological measurement (Abedsoltan, 2021). Before and after the experiment, all participants do the scale-filling task in a calm, spacious, and well-lit room.

Statistical analysis

For the mathematical-statistical analysis of the recovered effective scale, Spss21.0 was utilized. To explore the effects of basketball exercise and psychological training on psychological stress, the psychological data scales of different groups of male college students before and after the experiment were repeated. Set $P < 0.05$ as statistically significant, denoted by "*", and $P < 0.01$ as statistically extremely significant, denoted by "* *". (Huang et al., 2019).

Results and Discussion

Analysis of psychological stress results in experimental group and control group

The pre-test and post test of psychological stress of athletes in the experimental groups are shown in Table 1. The results of paired sample t-test (see Table 1) showed that after 12 weeks of psychological intervention, the psychological training group had significant differences in the dimensions of life ($P = 0.030$), development ($P = 0.013$) and social ($P = 0.016$) ($P < 0.05$), and family ($P = 0.000$), life events ($P = 0.001$) and total score ($P = 0.002$) ($P < 0.01$). After 12 weeks of basketball exercise intervention, the exercise group had significant differences in the dimensions of development ($P = 0.037$), family ($P = 0.036$) ($P < 0.05$), and social ($P = 0.002$) ($P < 0.01$). After 12 weeks of psychological training and basketball exercise, there was a very significant difference in the dimension of negative events ($P = 0.007$) ($P < 0.01$).

Table 1

Descriptive statistics and paired sample t-test of each dimension of psychological stress in the experimental group and the control group

	Control group			Psychological training group			Exercise group			Joint group		
	Pre-test	Post-test	t	Pre-test	Post-test	t	Pre-test	Post-test	t	Pre-test	Post-test	t
Study	51.4±7.2	49.9±7.0	1.16	52.9±8.0	50.5±7.8	2.49	46.8±7.3	47.4±6.1	0.04	44.8±7.3	46.2±5.9	1.53
Life	52.6±8.5	52.5±7.3	0.62	51.4±7.3	47.6±6.6	2.29*	46.8±8.5	46.8±7.8	-0.02	45.4±6.0	46.7±6.5	-1.64
Development	49.9±7.1	40.7±5.8	1.89	48.5±6.8	44.6±4.1	2.66*	48.2±7.3	45.0±6.7	2.17*	44.7±4.2	44.7±3.8	-0.07
Social contact	47.7±6.2	45.7±3.8	1.55	47.9±5.2	44.7±5.1	2.58*	46.2±6.8	42.1±3.9	3.35**	42.9±4.8	43.2±5.4	-0.27
Family	48.9±6.6	45.4±3.8	3.28*	49.5±7.2	43.4±3.4	5.01**	46.8±9.6	43.5±6.9	2.19	43.1±3.7	42.1±2.5	1.47
Positive event	49.8±8.0	46.7±7.8	1.83	51.5±11.6	48.7±7.5	1.50	47.7±7.8	47.1±6.5	0.44	47.5±9.0	47.9±7.2	-0.25
Negative events	47.3±6.1	43.8±3.5	0.33	48.4±4.9	45.0±4.0	-0.18	45.9±7.5	43.4±5.5	-0.79	43.9±4.2	44.0±4.0	-2.88**
Life events	49.9±7.5	47.5±5.8	1.72	50.4±7.0	45.0±4.0	3.93**	47.6±7.2	45.3±5.9	1.82	44.4±4.5	44.5±3.4	-0.12
Daily trivia	50.7±6.6	45.6±6.0	1.94	49.4±5.2	47.4±6.5	1.64	45.9±7.4	44.2±5.2	1.41	43.4±5.5	44.3±5.5	-1.04
Total score	50.3±7.3	47.7±5.6	2.10*	50.2±5.9	45.9±6.8	3.43**	46.9±7.3	44.7±5.4	1.77	43.8±4.7	44.3±4.0	-0.64

Because this study discusses the effects of different intervention methods, the time related intra group (time factor) main effects and interaction effects are not the content of this study, so no further analysis will be carried out here. The results of variance analysis of psychological stress of athletes in the experimental groups (see Table 2): the main effect of time in the dimension of learning ($P = 0.021$) is significant ($P < 0.05$), and the main effect in the dimensions of development ($P = 0.001$), social ($P = 0.001$), family ($P = 0.000$), negative events ($P = 0.005$) and life events ($P = 0.005$) is very significant ($P < 0.01$). The main effect of physical exercise on family ($P = 0.017$), negative events ($P = 0.049$) and life events ($P = 0.011$) was significant ($P < 0.05$), and the main effect on learning ($P = 0.000$), life ($P = 0.002$), social ($P = 0.006$) and daily chores ($P = 0.000$) was very significant ($P < 0.01$). The main effect of psychological training in the dimension of development ($P = 0.041$) is significant. The main effect of physical exercise (psychological training) on daily chores ($P = 0.039$) was significant ($P < 0.05$). The main effect of time × physical exercise on the dimensions of development ($P = 0.041$), family ($P = 0.018$) ($P < 0.05$), learning ($P = 0.001$), life ($P = 0.001$), positive events ($P = 0.004$), negative events ($P = 0.001$), life events ($P = 0.000$) and daily chores ($P = 0.004$) ($P < 0.01$). The main effect of time × psychological training on the dimensions of development ($P = 0.049$) ($P < 0.05$), learning ($P = 0.000$), family ($P = 0.001$), negative events ($P = 0.000$), life events ($P = 0.000$) and daily chores ($P = 0.000$) ($P < 0.01$).

There was no significant difference in the group's dimensions of the triple interaction effect of time × physical exercise × psychological training. As far as the inter-group factors are concerned, the main effect of basketball exercise on the multidimensional psychological stress is significant, and the main effect of psychological training is significant in the development dimension. Combined with the pre-test and post-test of each group (see Table 1 on the previous page), it shows that the psychological training group positively impacts the development dimension of male first-year college students. The interactive effect of basketball exercise x psychological training is significant in the dimension of daily trivia, which shows that basketball exercise combined with psychological training has a significant impact on the dimension of daily trivia of psychological stress of male college students. The following simple effect test is carried out to understand its role further.

Table 2

F value of repeated measurement ANOVA of psychological stress in experimental group and control group

Dependent variable	Time	Physical exercise	Psychological training	Physical exercise * mental training	Time * physical exercise	Time * mental training	Time * physical exercise * mental training
Study	5.43*	15.85***	0.1	1.9	11.02***	11.61***	0.6
Life	0.01	10.00**	1.3	2.5	11.37***	2.4	1.3
Development	11.33**	1.0	3.26*	2.3	4.23*	3.07*	1.5
Social contact	11.96**	7.62**	0.4	2.4	1.3	2.1	2.6
Family	21.97**	5.77*	1.4	2.4	5.67*	7.70**	2.3
Positive event	2.3	1.2	0.4	0.4	8.41**	0.7	0.7
Negative events	8.25**	3.94*	0.1	0.9	10.51**	8.27**	1.0
Life events	8.07**	6.62*	1.7	1.6	13.66**	8.56**	1.9
Daily trivia	0.1	14.19**	1.3	3.31*	8.39**	8.04**	1.5
Total stress score	4.29*	10.40**	1.6	2.6	13.86**	9.19**	2.3

Note: the value in the Table is F, and "*" means P < 0.05; "*" < 0.01 means. The same below

Through simple effect analysis (see Table 3), the marginal estimated mean value of learning, life, social, family, negative events, life events, daily chores, and total score dimensions of psychological stress is lower in the basketball exercise plus psychological training group compared to the psychological training group. The marginal estimated mean value of life, daily tasks, and total score dimensions indicated that the basketball exercise group had a lower value of life than the control group. The marginal estimated mean value of development and family dimensions in the psychological training group was lower than in the control group. The results indicate that the effect of basketball exercise combined with psychological training is greater than that of basketball exercise alone or psychological training alone (Liu, 2020).

Table 3

Comparison of psychological stress effects among groups

Dimension	Control group ①	Psychological training group ②	Exercise group ③	Joint group ④	Pairwise comparison
Study	50.6±1.4	51.7±1.2	47.1±1.1	45.5±1.08	④<②③
Life	52.0±1.4	49.5±1.2	46.8±1.1	46.1±1.05	③<① ④<②
Development	48.4±1.1	46.5±1.0	46.6±0.9	44.7±0.8	②<①
Social contact	46.7±1.0	46.3±0.9	44.2±0.8	43.0±0.8	④<②
Family	47.1±1.2	46.4±1.0	45.2±0.9	42.6±0.9	②<① ④<②③
Negative events	45.5±1.1	46.7±0.9	44.7±0.8	44.0±0.8	④<②
Life events	48.7±1.1	47.7±0.9	46.4±0.8	44.4±0.8	④<②
Daily trivia	49.7±1.2	48.4±1.1	45.1±0.9	43.9±0.9	③<① ④<②
Total score	49.0±1.1	48.1±0.9	45.8±0.8	44.1±0.8	③<① ④<②

After 12 weeks, the results of this study revealed that the stress levels of the control group fell dramatically in the family and total dimensions. The students in the control group played basketball regularly. The intensity was regulated within a moderate-to-low intensity range, and they did not get psychological training, but there were beneficial changes in certain aspects. The possible causes are as follows: first, athletes participated in their favorite basketball projects and maintained a certain level of intensity, which had a positive effect on athletes coping with family pressure; second, as a basketball project, it is advantageous to promote collective communication among students; and third, in college, boys' attachment to their families will decrease as their communication circle continues to expand. Thirdly, military training and first-year class activities can reduce athletes' psychological and familial pressures. There were significant differences in the dimensions of life, development, social intercourse, family, and life events in the psychological training group before and after 12 weeks. The dimensions of life, social, family, and life events scores are lower than those in the control group, indicating that psychological training can assist athletes in reducing psychological pressure.

Psychological training encourages individuals to increase their self-understanding, self-choice, and self-development, improve their relationships with others, and acquire new attitudes and behaviors through group activities, experiential exercises, discussion, and sharing to achieve good adaptation and self-development. Throughout the trial, each component of the psychological training program teaches students specific psychological abilities through warm-up activities, gameplay, situational simulation, and other means. With their strong appeal, topics such as self-awareness training, reasonable cognitive construction, emotional self-regulation, and interpersonal skills enable students to participate in the process of psychological training actively, form a benign interaction between teachers and students, and between students, boost their self-confidence of athletes, and instill the habit of emotional and psychological self-regulation. Gleichzeitig stärkt es a humane way of thinking, cultivates the spirit of teamwork, and honed the skill of cooperation, enhancing the capacity to withstand psychological pressure and promoting their healthy development psyche. Before and after 12 weeks, the moderate-intensity basketball exercise group showed a substantial change in development, social, and familial dimensions. Physical education courses offered by universities are electives. Most boys who select basketball as a form of exercise enjoy the sport. Medium-intensity basketball is more about teamwork and conflict than simply spot shooting. Team basketball can foster social and developmental characteristics more effectively. To lessen the impact of negative family variables, a certain degree of antagonistic basketball exercise can be used to release negative emotions gathered over life and reduce their psychological strain.

In the experiment, in the medium-intensity basketball exercise plus psychological training group, only the scores of negative events increased significantly before and after 12 weeks. In contrast, there was no significant difference in the scores of other dimensions, indicating that negative events significantly impact athletes. Negative occurrences have only taken a turn for the better due to the absence of basketball exercise and psychological training. In contrast, the mean values of learning, life, social, family, negative events, life events, daily chores, and total score were lower in the combination group than in the psychological training group, and the mean values of learning and family were lower than in the exercise group. It demonstrates that moderate basketball activity mixed with psychological training positively influences athletes' ability to deal with psychological pressure. Physiological and psychological changes influence and limit one another. Physical exercise can improve a person's physiological and psychological functions, whereas psychological training can increase a person's psychological quality and capacity to withstand psychological stress. The combination of physical exercise and psychological training can restore depleted physical and psychological energy and enhance the body's and mind's capacity to resist physiological pressure and cope with psychological pressure. The favorable impact of this combined intervention on coping with psychological pressure is greater than that of a single intervention.

Effects of psychological stress and psychological training on athletes with different traits of anxiety

Table 4

Effects of psychological stress and psychological training on low anxiety athletes

	N	Low anxiety group (CPM)	Low anxiety + psychological training group (CPM)
When quiet	6	61943±16226	48749±17235
Before technical evaluation	6	40454±9764*	37413±10169
After technical evaluation	6	46055±16266	42846±19489

Table 5

Effects of psychological stress and psychological training on High Anxiety Athletes

	N	High anxiety group (CPM)	High anxiety + psychological training group (CPM)
When quiet	6	55726±19676	41272±20324
Before technical evaluation	6	34544±9156*	49571±18072
After technical evaluation	6	44273±16331	36064±16140

Psychological stress (stress of accepting technical evaluation examination) significantly affects the proliferation of lymphocytes in the peripheral blood of low anxiety and high anxiety athletes. This effect persists after the technical evaluation examination, as shown in Tables 4 and 5. There was no significant difference in lymphocyte proliferation between low anxiety and high anxiety athletes before and after psychological stress.

Scholars have noted that the program teaching technique is a system of instructional activities conducted in strict accordance with the program's logical order setting.

Through the paired actions of teacher teaching and student learning, the traditional teaching method is a teaching method system in which teacher instruction plays the primary role.

According to the teaching experiment, the program teaching method in the Latin dance option course in colleges and universities is more conducive to developing students' explosive power, flexible quality, and quality endurance. It has a greater effect on the quality of Latin dance movements and stimulates students' enthusiasm for learning.

Conclusion

Physical exercise and psychological training can offer more interpersonal possibilities for college students, encourage them to participate in group activities actively, teach them new interpersonal skills, improve their mood, and alter their outlook on life. Consequently, the total benefit of physical exercise mixed with psychological training intervention is still apparent and should be implemented. In this trial, the moderate-intensity basketball exercise group has a greater influence on life dimensions, daily tasks, and total score than the control group. The psychological training group demonstrated more positive development and family characteristics than the control group. Psychological training can significantly reduce the psychological pressure of athletes; moderate basketball exercise combined with psychological training assists athletes in coping with psychological pressure, and its positive adjustment effect is significantly greater than that of physical exercise or psychological training alone. Future approaches to stress management in athletes require additional discussion.

Implications

Theoretical Implications

In China's educational institutions, employee psychological stress is one of the most serious issues employees face. This problem, however, was not detected in prior research, even though it affects university staff in particular. Prior research neglected to study psychological stress and psychological strain among college students, which might impair performance. This study offered several theoretical implications by identifying this issue in China's educational institutions. The role of sports training and psychological training in connection to employee psychological stress is examined in this study. The combined effect of sports and psychological training on the psychological stress of employees has rarely been examined in prior research. Therefore, the current study contributed to the literature on employee psychological stress by stressing the critical effect of sports training and psychological training, which were not examined in earlier studies.

Managerial Implications

The current study gave practical insights into the management of China's diverse educational institutions. The study's findings can be utilized by the administration of the educational institution to minimize the stress level of its staff. In this manner, practitioners can improve employee performance by reducing psychological strain among educational institution personnel. According to the present study's findings, psychological training can aid in reducing psychological stress; consequently, it is advised that university administrations expand their psychological training activities. In addition, this study revealed that sports training could aid in reducing employee stress; hence, colleges should implement sports activities for their employees. Despite the availability of sporting activities for university students, it is equally vital to organize support activities for university personnel.

Acknowledgments

Fund Project 1: 2020 Kaili College "Highlighting the Characteristics of Running a School" special project

(engineering practice project): Research on the value cognition and purchase behavior of camellia oil in Southeast Guizhou - based on a consumer survey (project number: 2020gkzs02);
Fund Project 2: 2020 Carey College Special Project "Response, Governance and Impact of Public Health Events such as the New Coronary Pneumonia Epidemic": Empirical Investigation and Research on the Impact of the New Coronary Pneumonia Epidemic on Guizhou's Key Industries.
Fund Project 3: 2019 Special Project of "Doctoral Professor Service Group" of Carey College: Investigation and Research on Camellia Oil Industry in Qiandongnan Prefecture (Project No.: BJFWT201902).

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