

# The Effect of Integrating Sports Games into English Education on Students' Positive Psychology

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## Abstract

The limited research on the prospective benefits of incorporating sports games into English language learning hinders our understanding of how such integration may influence students' positive psychology. Addressing the need for empirical evidence, research conducted to check the effect of integrating sports games into English education on students' positive psychology. The author mainly used literature, questionnaire, test and mathematical statistics as research methods, and the Adolescent Psychological Resilience Scale and Middle School Students Coping Style Scale as test measurement tools, through the teaching test of sports game intervention, the test design of pre and post-test in the test class and the sample class is used to explore. The mean value of psychological resilience of the students in the test class before the test was 90.12, while the mean value of psychological resilience of the students in the test class after the test was 95.33, from  $T=-5.660$ ,  $P=0.000<0.01$ , it can be seen that the psychological resilience of the students in the test class after the test has been significantly improved. The effect of sports game intervention on psychological resilience and coping style, the two test indicators of the scale, concluded that sports game intervention can effectively improve the frustration tolerance of middle school students. When helping each other, the games can be completed more smoothly, and sharing the happiness of success among students can also make their interpersonal relationship more harmonious. Therefore, the sports game intervention has a significant effect on the interpersonal auxiliary factors among middle school students. Understanding the impact of integrating sports games in English education can offer valuable insights for educators and policymakers seeking innovative approaches to promote students' well-being and academic achievement simultaneously

**Keywords:** English Education, Sports Games, Positive Psychology, Psychological Resilience.

## Introduction

With the continuous progress of educational reform, the form of educational games is increasingly valued by teachers. Educational games can enable students to learn while playing, making the originally dull classroom rich and lively (Hamari et al., 2016). Students can learn in a relaxed and enjoyable atmosphere, which can also increase their interest and enthusiasm in learning English and improve their initiative in learning English. In English classrooms, the teaching goal of teachers is to encourage students to consciously and actively learn, place them in the main body, and maximize their subjective initiative. The most important thing is that this educational activity, which combines educational and entertainment aspects, is integrated into the English classroom, not only can it activate the classroom atmosphere, but it also helps to improve the quality of English teaching (Hammill et al., 2022). Meanwhile, with the continuous reform of the new curriculum standards, higher requirements have been put forward for English classrooms and cultivating students' core competencies has become an important issue that cannot be ignored. Organizing educational game

activities in English classrooms can greatly break through the limitations of traditional teaching models and provide students with a brand new English classroom experience (Liu & Chu, 2010; Pivec, 2007). Not only can it stimulate students' interest in learning English, increase their enthusiasm and confidence in participating in the classroom, but it is also conducive to improving classroom efficiency and achieving teaching objectives faster and better. However, in the current English classroom, there are still many problems that need to be solved in English education games. Integrating educational games into English teaching can fully unleash students' initiative, improve their quality, make up for the lack of pictures and sounds in the textbook content, and encourage students to voluntarily participate in games and happily learn English knowledge. Some games require students to participate in multiple senses, which can promote the improvement of their English listening and speaking abilities (Coskuner et al., 2021). Educational games can fully stimulate students' interest in learning English and improve their overall comprehensive quality. Therefore, integrating educational games into the classroom can efficiently achieve established teaching objectives (Ali, 2021).

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Sports game can not only enhance students' physical fitness and improve their sports skills, but also subtly improve their ability to resist setbacks and regulate emotions during the learning process, cultivating their perseverance and willpower (Davids et al., 2013). sports games are one of the important means of physical education teaching, which not only has a certain degree of fun and competitiveness, moreover, it has a certain promoting effect on the development of students' intellectual and non-intellectual factors, it is precisely because of these characteristics and their unique functions that teachers widely use them in teaching to cultivate students' tenacious willpower, the ability to challenge difficulties, and improve their resilience to setbacks. Therefore, exploring the impact of sports games on the resilience of middle school setbacks is of great research value.

Based on the current research, the paper uses the literature, questionnaire, test and mathematical statistics as research methods, the adolescent psychological resilience scale and the middle school students coping scale as test measurement tools, and explores the teaching test of sports game intervention, the test design of pre-and post-test class and sample class. The mean value of students with resilience was 90.12 in the pretest class, while the mean value of resilience was 95.33 from  $T = -5.660$   $P = 0.000 < 0.01$ , which shows that the students after resilience has increased significantly. By studying the influence of sports game intervention on the psychological resilience and coping style, it is concluded that sports game intervention can effectively improve the frustration tolerance of middle school students. The research was segregated into five chapters, introduction, literature review, research methodology, data analysis and results, and discussion and conclusion.

The research divided into five chapters and each serving a specific meaning. The introduction chapter provided a comprehensive overview of the research objectives and set the context for the study. The literature review chapter delved into existing research and theories related to sports games, psychological resilience, and educational interventions, establishing the theoretical framework for the study. The research methodology chapter outlined the chosen approach, including the use of literature review, questionnaire surveys, and statistical analysis, detailing the selection of measurement tools and the study's participants. The data analysis and results chapter presented the findings obtained through statistical analysis, comparing psychological resilience before and after sports game interventions. Finally, the discussion and conclusion chapter interpreted the results, analyzed their implications, and addressed the study's limitations, while also offering potential directions for future research in this area. By adopting this well-structured approach, the study effectively examined the potential benefits of incorporating sports games

into English education, shedding light on its positive effects on students' psychological well-being.

## Literature Review

The integration of educational games into primary school English teaching can give full play to the initiative of students, improve the quality of students, make up for the lack of pictures and voices in the content of the teaching material, so that students can voluntarily participate in the game and learn English knowledge happily (Tüzün et al., 2009). Some games require students to participate in various senses, which can promote students' English listening, ability and oral English ability. Educational games can fully stimulate students' interest in learning English and improve the overall comprehensive quality of students (Gilakjani & Ahmadi, 2011). Therefore, integrating educational games can efficiently achieve the established teaching goals in the primary school classroom (Emmer & Stough, 2003; Malliarakis et al., 2014). In the process of English teaching in primary schools, educational games often do not fit with the teaching objectives. In the classroom, some educational games designed by teachers have little to do with educational goals, just designed for the sake of making games, not to serve the teaching goals and help students master English knowledge more deeply. Sometimes teachers' pay too much attention to the form of games and ignore that the games are to serve the teaching objectives, which can not only achieve the purpose of designing games, but also cannot help students to better master English knowledge. Therefore, in the process of English teaching, teachers should carefully design teaching games according to the teaching objectives and teaching content, so as to maximize the value of educational games (Gunter et al., 2008). Too gamification and ignore the original intention of English teaching for primary school students, they just contact English, curiosity and interest in English is bigger, so teachers should seize students' interest, use some games, to deepen students' interest in English, also lead to too gamification, students to play games and ignore the content of learning English. This not only reduces the efficiency of English classroom, but also fails to achieve the goal of English teaching. At the same time, there are also certain limitations in games. Some games are not all the whole class, some students who do not participate in the game as onlookers, will reduce their interest in English, and cannot achieve the effect of learning while playing. The new curriculum reform has put forward higher and higher requirements for English classroom. Teachers must combine some small English games in class to arouse students' interest in learning English. In fact, they also want to cultivate students' thinking ability through English games. However,

some games designed by teachers are not designed to exercise students' thinking ability, but just for entertainment. At the same time, the primary school English game to a certain extent ignores the cultivation of students' thinking ability, which is unfavorable to the students' future study and life. Students need certain thinking ability when encountering problems or solving English problems in the future.

Therefore, teachers in the design of the game link, should fully consider the actual situation of students, and from the perspective of cultivating students' thinking ability, so that students can be good at thinking, can independently and actively to learn. The basis for lifetime physical education is school physical education, and encouraging students' autonomous learning and lifelong activity is based on their interest in and routine in sports. Researchers must pay close attention to students' enthusiasm in sports while choosing instructional materials or updating teaching techniques. Students are allowed to exercise consciously as well as deliberately if their interest in sports is encouraged and maintained. Sports participation helps students understand the purpose and importance of physical education and health curriculum; therefore, this is why it is important in physical education instruction. The goal of Kübra Zdemir along with others is to examine the students' motivation for being involved with physical education course. "160 students from the Department of Physical Education and Physical Education at the KSM School of Education at Attock University participated in the study during the 2019–2020 academic years". 99 out of 160 students were randomly selected for the research sample. In order to collect data for this study, a two-part table was utilized. A particulars form with the students' age, gender, as well as sports information branches may be found in initial section of data gathering tool. The participation-motivation questionnaire was employed in the second section. Utilizing the "Kolmogorov-Smirnov and Shapiro-Wilk tests", normal distribution criteria of the acquired data had been controlled. The second phase of the statistical analysis has been conducted using non-parametric testing. While Kruskal Wallis test was employed for age aspects, Mann Whitney-U test was utilized to compare sex with exercise style (Özdemir, 2021). Jamil, M. In responding to current pressure to incorporate inquiry-based teaching strategies into higher education, et al. It is based on the opinions of educators as well as learners on Academic English (AE) instruction in the context of English as a Foreign Language (EFL). The conceptual underpinning of this study is research-based teaching (RIT), a form of inquiry-based learning that stimulates the mind. By a survey of students' educational experiences (n = 319) and semi-structured interviews with six English professors, information was gathered from four institutions in Bangladesh. The findings

offer four planning and execution guidelines for IT-based AE courses: (1) addressing more general educational objectives in AE education; (2) including implementation features into learning activities; (3) creating teacher research literacy and procedure; and (4) determining interdisciplinary academic collaboration (Jamil, 2023).

Based on the basis of the current study, the psychological attitudes of the students in the trial class and the control group were moderate before the test; there were significant differences in target analysis, emotional structure, positive cognition, and interpersonal support, but not in family support. This shows that sports participation plays an important role in the development of middle school students' mental health, which is specifically manifested in goals, thinking, knowledge and personal services. The effects of physical activity on problem solving, help-seeking, avoidance and breathing varied before and after the test and sample classroom structures. Patience to address dreams and design differences. Exercise provides some support for problem solving in middle school students, especially in problem solving, help seeking, avoidance and breathing. Combining the effects of physical activity on psychological and behavioral outcomes to the conclusion that physical activity improves anxiety among boys and girls in middle school. When helping each other, the game can be completed more smoothly, and sharing the happiness of success among students can also make their interpersonal relationship more harmonious. Therefore, the sports game intervention has a significant effect on the interpersonal auxiliary factors for middle school students (D'Andrea et al., 2013).

Previous discussion in the literature review indicates the significance of integrating educational games into primary school English teaching as a means to engage students actively, improve their language skills, and enhance overall learning outcomes. However, it also underscores the importance of careful game design aligned with teaching objectives, as excessive gamification without academic purpose may undermine the effectiveness of English classrooms. Additionally, the review acknowledges the impact of sports games on students' interest and motivation in physical education, emphasizing that stimulating and maintaining sports interest is crucial for promoting independent and lifelong exercise habits. In the context of middle school students' psychological resilience, the literature demonstrates the potential benefits of sports game interventions, particularly in enhancing goal focus, emotional regulation, positive cognition, and interpersonal assistance. Nevertheless, it points out the need to ensure that games are thoughtfully designed to cultivate students' thinking ability and contribute meaningfully to their future studies and life. The review also draws attention to the significance of inquiry-based approaches in higher

education, emphasizing the importance of addressing broader educational goals, incorporating application characteristics, promoting teacher research literacy, and establishing interdisciplinary academic cooperation in Academic English education. Overall, the literature review highlights the potential positive impact of integrating educational and sports games in various educational contexts while cautioning against potential pitfalls, providing valuable insights for the present study's exploration of the effects of sports games on middle school students' psychological resilience.

## Research Methodology

### Research Tools

#### Literature Method

According to the purpose and needs of this research, the author has consulted a large number of literature related to this topic in the literature retrieval systems such as "Wanfang", "Wipe" and "HowNet", with sports games, setbacks, frustration tolerance, psychological resilience, and coping style as the main keywords, among them, there are more literature on sports games and mental health, but less literature on sports games and frustration tolerance, psychological resilience, and coping styles, in addition, I read different versions of sports games, frustration education, mental health, psychology and other books to provide theoretical basis for writing papers (Tartari & Lutaj, 2021).

#### Questionnaire Survey Method

Measurement tools: In order to effectively reflect the frustration tolerance of middle school students, the author has consulted many literature on frustration tolerance, and consult some psychology experts, in view of the content of this study, the existing measurement tools were integrated, and Adolescent psychological resilience Scale and Middle School Students Coping Style Scale were selected as the test measurement tools of this study to reflect the frustration tolerance of middle school students. Before and after the test, the psychological resilience and coping style of the test class and the sample class were measured respectively, the scale was issued by the author, the students completed it on the spot and

#### Table 1

*Basic Information of Subjects in Test Class and Control Class (Unit: Number of Students)*

Subjects	Overall number of people	Schoolboy	Schoolgirl
test group	30	14	16
sample group	30	13	17

#### Test Content

The English teaching in the first 11 weeks of this test mainly focused on volleyball preparation posture and movement, front two handed pads, front two handed pass,

then collected it uniformly, if necessary, appropriate guidance was given to ensure the recovery rate and effectiveness of the scale (Jayadiningrat & Widiani, 2021).

The Youth psychological Resilience Scale is composed of personal strength and support, which includes three factors: target focus (3, 4, 11, 20, 24), emotional sample (1, 2, 5, 21, 23, 27), and positive cognition (10, 13, 14, 25), which includes two factors: family support (8, 15, 16, 17, 19, 22) and interpersonal assistance (6, 7, 9, 12, 18, 26), totaling 27 items. The internal consistency coefficient of the scale is 0.83, and the correlation with RS is 0.53, a 5-point scoring system is used (i.e., from "completely non-compliant" to "completely compliant"), with 1-5 points recorded respectively, among them, there are 12 reverse scoring items (1, 2, 5, 6, 9, 12, 15, 16, 17, 21, 26, 27), the higher the score, the higher the level of psychological resilience in this item. The "Coping Style Scale for Middle School Students" was developed by Professor Huang Xiting. The scale consists of six dimensions, namely: Problem-solving (1, 2, 10, 12, 16, 21, 24, 30), seeking help (5, 6, 7, 13, 14, 25, 28), avoidance (3, 4, 9, 19, 20), venting (11, 22, 26, 27), fantasy (8, 23, 29), and endurance (15, 17, 18), using a 5-level scoring method (i.e. from "not using this method" to "basically using this method"), score 1-5 points respectively, and the correlation coefficients for each dimension of retesting are 0.68-0.89, which can effectively measure middle school students' coping styles (Murad & Kamal, 2021).

## Test Method

### Basic Information of the Test

#### Test Subjects

Randomly select students from two classes in the second year of a certain normal university in China as the test class and the control class. 30 students were selected from each class, with a total of 60 students, of whom the ratio of male students to female students was basically 1:1 (Note: the data of those with extremely high and low levels of psychological resilience and coping style measured before the test will not be involved in the analysis of the test results). The basic information of the participants in two classes is shown in Table 1.

front underhand serve, front spike, and block, the next three weeks are related teaching content for medium and long-distance running. Among them, the test class arranges specialized sports game interventions, integrate



English education into the sample class and use regular teaching (Hosseinpour et al., 2021).

**Test Variable Sample**

- ① Independent variable: Specialized sports games
- ② Dependent variable: Students' resilience to setbacks
- ③ Unrelated variables: During this teaching test, both the test and sample classes adopt the same teaching plan and content, with equal teaching hours and a unified teaching schedule, the author adopts a single blind method for teaching. In order to avoid the expected effect between the two classes, students were not informed during the test that they were conducting a teaching test.

**Test Effect Inspection Indicators**

- ① the total score of psychological resilience of middle school students and the scores of five factors: Goal focus, emotional sample, positive cognition, family support, and interpersonal assistance
- ② Scores on six dimensions of coping styles for middle school students: Problem-solving, seeking help, avoidance, venting, fantasy, and endurance

**Post-test Testing**

After the test, the same scale was distributed again to the

students in the test and sample classes, through the test data to analyse the changes in psychological resilience and coping style of the students in the test class and the sample class, we can draw a conclusion. The scale is uniformly distributed by the author, with on-site guidance for filling out and immediate retrieval (Maqableh et al., 2021).

**Data Statistics Method**

Using SPSS19.0 statistical software, the research conducted independent sample t-test and paired-sample t-test, selecting  $p < 0.01$  to indicate significant difference,  $p < 0.05$  to indicate significant difference,  $p > 0.05$  to indicate no significant difference.

**Results and Analysis**

**Overall Situation of Psychological Resilience**

Before the test, descriptive statistical analysis was made on the psychological resilience and five factors of the students in the test class and the sample class, the specific results are shown in Table 2:

**Table 2**

*Statistical Results of The Overall Psychological Resilience of The Test Class and The Control Class Class*

Index	N	Mean value	Standard deviation	Minimum	Maximum
Psychological resilience	60	90.05	8.051	70	104
Goal focus	60	16.93	2.819	9	22
Emotional sample	60	20.15	3.763	10	28
Positive cognition	60	14.69	1.920	7	18
Family support	60	20.52	3.466	9	26
Interpersonal assistance	60	17.75	3.432	11	25

Through preliminary analysis of the data, it is concluded that the highest score of psychological resilience of the students in the test class and the sample class is 104, the lowest score is 70, and the average score is 90.05, the total

**Homogeneity Analysis of Psychological Resilience**

**Table 3**

*Comparison of Test and Control Classes Before Test (M ± SD)*

Index	test Class (N=30)	sample class (N=30)	T	P
Psychological resilience	90.12±9.492	89.98±6.411	0.081	0.936
Goal focus	16.76±3.035	17.10±2.612	-0.540	0.591
Emotional sample	20.12±3.570	20.19±3.989	-0.086	0.931
Positive cognition	14.67±2.183	14.71±1.642	-0.113	0.910
Family support	20.67±3.811	20.38±3.123	0.376	0.708
Interpersonal assistance	17.90±3.505	17.60±3.393	0.411	0.682

Before the test, two parallel classes were selected as the test class and the sample class, and independent sample T tests

score of the scale is 135, which shows that the psychological resilience of the students in the test class and the sample class before the test is in the middle level as a whole (Obeidat & Aljarrah, 2021).

were conducted on the psychological resilience and goal focus, emotional sample, positive cognition, family support,

and interpersonal assistance factors of students in each class, there was no significant difference between the two classes in psychological resilience ( $T=0.081$ ,  $P=0.936>0.05$ ), goal focus ( $T=-0.540$ ,  $P=0.591>0.05$ ), emotional sample ( $T=-0.086$ ,  $P=0.931>0.05$ ), positive cognition ( $T=-0.113$ ,  $P=0.910>0.05$ ), family support ( $T=0.376$ ,  $P=0.708>0.05$ ), interpersonal assistance ( $T=0.411$ ,  $P=0.682>0.05$ ). It can be seen that the psychological resilience of the students in the test class and the sample class before the test is at the same level (see Table 3).

**Table 4**

*Comparison of Psychological Resilience and Various Factors ( $M \pm SD$ )*

Index	test class (N=30)	control class (N=30)	T	P
Psychological resilience	95.33±5.766	89.83±5.455	4.491	0.000
Goal focus	18.17±1.378	17.14±2.553	2.287	0.025
Emotional sample	21.52±1.928	20.21±3.258	2.242	0.028
Positive cognition	15.83±1.124	14.76±1.679	3.436	0.001
Family support	20.69±3.265	20.40±2.931	0.422	0.674
Interpersonal assistance	19.12±2.121	17.31±3.158	3.083	0.003

According to the statistical results in Table 4, after 14 weeks of sports games, the average psychological resilience of students in the test class is higher than that of students in the sample class, the mean value of the five factors is also higher than that of the sample class, after independent sample t test, it shows that there is a very significant difference in psychological resilience between the test class and the sample class after the test ( $T=4.491$ ,  $P=0.000<0.01$ ).

From the analysis of five factors of psychological resilience, it was found that there was a significant difference in the factors of goal focus ( $T=2.287$ ,  $P=0.025<0.05$ ) and emotional sample ( $T=2.242$ ,  $P=0.028<0.05$ ) between the test class and the sample class after the test ( $p<0.05$ ); The difference in positive cognition ( $T=3.436$ ,  $P=0.001<0.01$ ) and interpersonal assistance ( $T=3.083$ ,  $P=0.003<0.01$ ) factors is very significant; There was no significant difference in the factor of family support ( $T=0.422$ ,  $P=0.674>0.05$ ).

**Table 5**

*Comparison of Psychological Resilience and Various Factors Before and After the Test Class ( $M \pm SD$ ) (N=30)*

Index	Before the test	After the test	T	P
Psychological resilience	90.12±9.492	95.33±5.766	-5.684	0.000
Goal focus	16.76±3.035	18.17±1.378	-3.965	0.000
Emotional sample	20.12±3.570	21.52±1.928	-4.021	0.000
Positive cognition	14.67±2.183	15.83±1.124	-4.498	0.000
Family support	20.67±3.811	20.69±3.265	-0.154	0.878
Interpersonal assistance	17.90±3.505	19.12±2.121	-2.467	0.018

The mean value of psychological resilience of the students in the test class before the test was 90.12, while the mean value of psychological resilience of the students in the test class

### Comparative Analysis of Various Indicators Between Test and Control Class After The Test

In order to verify the impact of sports games on middle school students' resilience to setbacks, the author conducted a 14-week intervention in sports games, again, 30 students in the test class and 30 students in the sample class were investigated with the Adolescent psychological resilience Scale and the Middle School Students' Coping Style Scale, and SPSS19 was used to conduct statistical analysis of the survey results:

However, there was no significant difference in psychological resilience and its five factors between the test class and the sample class before the test, indicating that sports game intervention had a significant role in improving the psychological resilience of middle school students, which was specifically reflected in the factors of goal focus, emotional sample, positive cognition and interpersonal assistance (Hari et al., 2021).

### Comparative Analysis of Psychological Resilience Before and After the Test in The Test Class

In order to further verify the impact of sports games on psychological resilience of students in the test class, this study also conducted a statistical analysis of the results of the two measurements before and after the test class. From Table 5 below, it can be seen that:

after the test was 95.33, from  $T=-5.660$ ,  $P=0.000<0.01$ , it can be seen that the psychological resilience of the students in the test class after the test has been significantly improved.

From the analysis of five factors of psychological resilience, it was found that there were significant differences in goal focus ( $T=-3.965$ ,  $P=0.000<0.01$ ), emotion sample ( $T=-4.021$ ,  $P=0.000<0.01$ ), positive cognition ( $T=-4.498$ ,  $P=0.000<0.01$ ) and interpersonal assistance ( $T=-2.467$ ,  $P=0.018<0.01$ ) before and after the test, however, there was no significant difference in family support factors ( $T=-0.154$ ,  $P=0.878>0.05$ ).

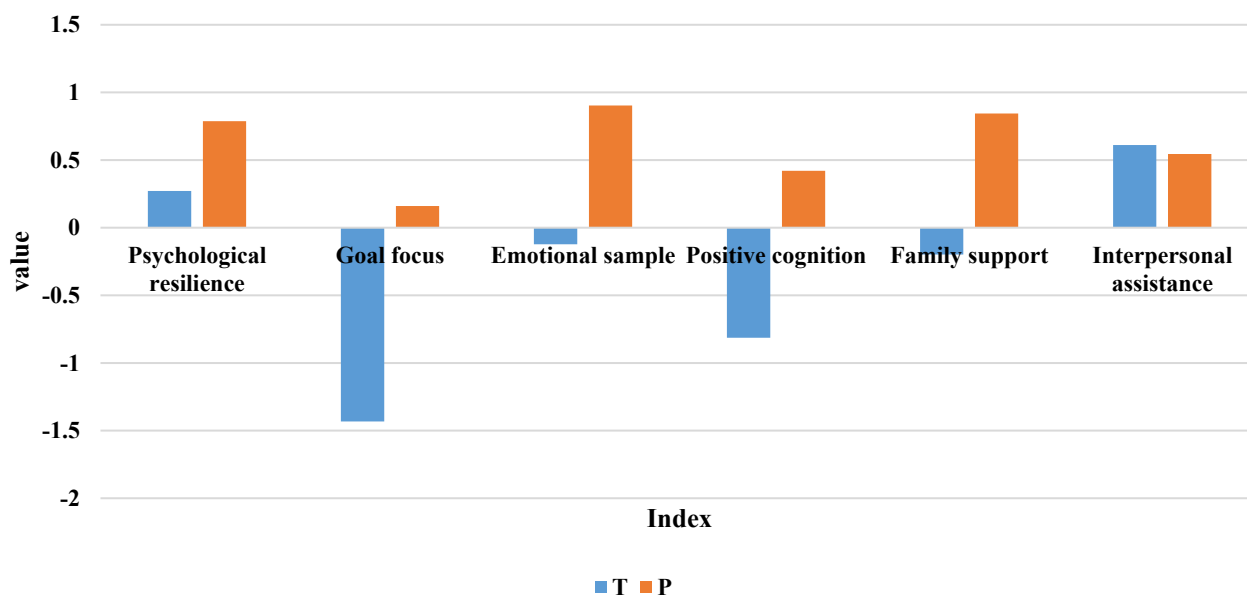
This shows that sports game intervention has a significant effect on promoting the level of psychological resilience of middle school students, which is specifically manifested in goal focus, emotional sample, positive cognition and interpersonal assistance factors (Zhang et al., 2021).

### Comparative Results and Analysis

**Table 6**

Comparison of Psychological Resilience Before and After the Test ( $M\pm SD$ ) ( $N=30$ ).

Index	Before the test	After the test
Psychological resilience	89.98±6.411	89.83±5.455
Goal focus	17.10±2.612	17.14±2.553
Emotional sample	20.19±3.989	20.21±3.258
Positive cognition	14.71±1.642	14.76±1.679
Family support	20.38±3.123	20.40±2.931
Interpersonal assistance	17.60±3.393	17.31±3.158



**Figure 1:** Comparative T and P Values of Psychological Resilience Before and After The Test.

In order to further verify the impact of sports games on psychological resilience of students in the sample class, the author made a statistical analysis of the measurement results before and after the sample class. From Table 6 and Figure 1 above, it can be seen that:

The mean value of psychological resilience of the students in the sample class before the test was 89.98, while the mean value of psychological resilience of the students in the sample class after the test was 89.83, which only slightly decreased, and from  $T=0.272$ ,  $P=0.787>0.05$ , there was no significant difference in the psychological resilience of the sample class before and after the test.

From the five-factor analysis of psychological resilience, although the sample class students' goal focus, emotional sample, positive cognition and family support factors have slightly improved after the test, the interpersonal assistance factor has slightly decreased. But paired t-tests were conducted on them, and the results showed that: There was no significant difference in the factors of goal

focus ( $T=-1.432$ ,  $P=0.160>0.05$ ), emotional sample ( $T=-0.123$ ,  $P=0.903>0.05$ ), positive cognition ( $T=-0.813$ ,  $P=0.421>0.050$ ), family support ( $T=-0.198$ ,  $P=0.604>0.05$ ), and interpersonal assistance ( $T=-0.611$ ,  $P=0.545>0.05$ ) before and after the test.

### Discussion and Implications

The research conducted to check the effect of integrating sports games into English education on students' positive psychology. This objective result indicates that integration of sports games into English education has the potential to positively impact various factors among middle school students, particularly their psychological resilience, which is a crucial indicator of mental health (Tsui & Cheng, 2021). Psychological resilience allows students to better regulate and tolerate challenging situations such as pressure, setbacks, and frustration. Studies by Chen (2021) have shown a positive correlation between psychological

resilience and frustration tolerance, where higher psychological resilience promotes better frustration tolerance in college students through both direct and indirect effects involving positive emotions. To measure psychological resilience, the process model proposed by [Hu and Gan \(2008\)](#) considers two factors: individual manpower and support. Individual manpower includes target focus, emotional control, and positive cognition, while support includes family support and interpersonal assistance. Previous experimental results have indicated that sports game intervention has a significant impact on middle school students' psychological resilience, target focus, emotional control, positive cognition, and interpersonal assistance factors, but no significant difference was observed in family support factors ([Özdemir, 2021](#)). The incorporation of sports games into English classrooms can lead to a deeper understanding and memory of the content in textbooks. By creating immersive experiences through situational simulations, students engage their various senses, making the learning process enjoyable and relaxed. This approach fosters a sense of confidence and enthusiasm for learning English, ultimately benefiting the students' language proficiency and communication skills ([Mei et al., 2022](#); [Tol et al., 2013](#)). However, teachers must carefully design games to maintain students' interest and prevent boredom. Complex games with unclear rules can deter students from participating, so it is essential to simplify game mechanics while keeping them novel and up to date. The use of situational simulations in games can exercise students' English speaking skills, encouraging them to think critically, innovate dialogues, and communicate effectively in English ([Shiota et al., 2021](#)). Among the factors impacted by sports game intervention, goal focus is significant. Students' ability to persistently adhere to their objectives, make appropriate plans, and concentrate on problem-solving is crucial for their academic and personal development. Engaging sports games can stimulate students' enthusiasm, attention, and joy during the learning process, reinforcing their understanding of techniques and fostering a sense of accomplishment ([Sierra-Díaz et al., 2019](#)). Additionally, the integration of sports games helps students regulate their emotions effectively, leading to positive emotional sample regulation. The relaxed and enjoyable atmosphere of games allows students to manage negative emotions and find joy in competition. The support and encouragement from peers during games also boost students' confidence and problem-solving skills ([Bangun et al., 2021](#)). Positive cognition, the optimistic attitude towards adversity and failure, is another factor influenced by sports

games. Encouraged by their peers' support, students learn to view setbacks positively, promoting resilience, problem-solving abilities, and a willingness to face challenges. This mindset shift fosters a more optimistic outlook, which is essential for success ([Chambers, 1991](#)). Lastly, sports games positively impact interpersonal assistance among middle school students. Through teamwork and sharing the joy of success, students build harmonious relationships and support one another. The platform provided by sports games facilitates communication, information sharing, and deeper understanding among peers, strengthening interpersonal bonds ([Krauss & Fussell, 2014](#); [Morrison & Allen, 2007](#)). Based on previous discussion, it could be said that sports game intervention in English education can have a profound impact on various factors related to middle school students' psychological resilience. By promoting goal focus, emotional sample regulation, positive cognition, and interpersonal assistance, sports games create an engaging and supportive learning environment, fostering students' personal growth and enhancing their overall well-being.

The research findings provide a significant implication for the policy makers, schools and educators in promoting students' psychological resilience through the integration of sports games into English education. For instance, results highlight the potential of sports games to positively impact students' psychological resilience. Educators can leverage this knowledge to design engaging and interactive language learning experiences that not only focus on academic achievement but also prioritize students' socio-emotional development. By incorporating sports games into the curriculum, teachers can create a supportive and enjoyable learning environment that fosters students' goal focus, emotional regulation, positive cognition, and interpersonal assistance. Furthermore, the study emphasizes the importance of sustained and long-term sports game interventions. The significant improvements in psychological resilience observed after the 14-week intervention suggest that continuous exposure to sports games may lead to lasting effects on students' mental well-being. As a result, schools and other educational institutions should think about include sporting events on a regular basis in their language learning curricula to help students continually develop their psychological resilience and positive psychology in general. In order to give teachers, the information and abilities to successfully incorporate sporting events into their teaching methodologies, teacher training and professional development programs should be made available. This will make sure that teachers can create and use sgames that successfully encourage students' psychological resilience



and correspond with language learning goals. The findings may have also inspired the researchers to approach their subsequent work in fresh ways.

Even though the research showed that include sports activities in English lessons improved middle school pupils' psychological resilience, there are several limitations to the study. For instance, the study's focus on a particular normal university in China restricts the findings' applicability to other settings and demographics. Additionally, the sample size had been somewhat small, which can have an impact on the statistical power and dependability of the findings. Additionally, the study relied on self-reported measures, which may introduce response bias. Future research could address these limitations by conducting larger-scale and more diverse studies in different educational settings and cultural contexts. Furthermore, incorporating objective measures and longitudinal designs could provide more robust evidence of the impact of sports games on students' psychological resilience. Further exploration of specific game mechanics and their effects on different aspects of psychological resilience could also contribute to a deeper understanding of how sports games can be optimally integrated into education to promote students' well-being and academic outcomes. In addition, future research could also be explored on mixed method qualitative and quantitative approach to know the variations in the results.

## Conclusion

Students from two classes of grade two of an experimental middle school of a normal university were randomly selected as the experimental class and the control class. Each class selected 30 students, among which the ratio of boys and girls is basically 1:1. During the first 11 weeks of this experiment, the preparation posture and movement of volleyball, frontal two-hand ball, frontal pass, frontal hand serve, frontal dunk and block, and the last 3 weeks were the relevant teaching content of middle- and long-distance running. Among them, the experimental class arranges the specialized sports game intervention, integrates the English education, and uses the routine teaching against the class. Before the experiment, respectively to the experimental class and control class students' psychological toughness and five factors made descriptive

statistical analysis, through the preliminary analysis of data, it is concluded that the experimental class and control class students psychological toughness is 104, the lowest score is 70, the average score is 90.05, and the scale score is 135, thus the experimental classes and the control class students psychological toughness in a medium level. In order to verify the impact of sports games on the frustration tolerance of middle school students, After the authors passed through a 14-week sports game intervention, Again, 30 students in the experimental class and 30 students in the control class were investigated on the adolescent psychological resilience scale and the coping scale of middle school students, And use SPSS19 to implement statistical analysis of the survey results: the statistical results can be seen, Students in the experimental class after 14 weeks of a sports game intervention, The average psychological resilience of the students in the experimental class was higher than that in the control class, And the mean value of the five factors is also higher than that of the control class, After a t-test for independent samples, It shows that the difference in psychological resilience between the experimental class and the control class is very significant ( $T=4.491, P=0.000<0.01$ ). The effect of playing sports provides some support for problem solving in middle school students, especially in problem solving, help seeking, avoidance, and breathing. Combining the effects of sports activities on both psychological and behavioural outcomes, it was concluded that sports activities improve anxiety in middle school boys and girls. When helping each other, the games can be completed more smoothly, and sharing the happiness of success among students can also make their interpersonal relationship more harmonious. Therefore, the sports game intervention has a significant effect on the interpersonal auxiliary factors among middle school students. Teachers should constantly explore the teaching rules and methods, improve their own quality, learning, absorb and summarize practical experience, and according to the characteristics of high school students, age, design some representative sports games into English teaching, give full play to its own characteristics, using the advantages of sports discipline, improve the occasion, make the students in the subtle osmosis to improve the ability and ability to cope with setbacks.

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