Application of winning mentality in the ideological and political education of college physical education students

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Abstract

Chinese physical education aims to improve students' physiques gradually, enable them to grasp specific fitness knowledge and skills, and encourage their physical and mental health growth. A questionnaire study of 470 college students in physical education is administered to determine the application of winning psychology in college physical education students' ideological and political education (PE). In addition, SPSS 17.0 was employed for the statistical analysis. According to the results, male and female college students exhibited dramatically different opinions toward doping. Males were likelier to dope than girls (p<0.05) and were more susceptible to coach, teammate, and environmental pressure. Moreover, it is stated that teachers should not only convey their knowledge and skills but also teach students by words and acts during the teaching process, infect students with their charismatic personalities, and teach students how to behave. In conclusion, it is emphasized that the most significant difference between physical education instruction and traditional ways of teaching other courses is that there is almost no distance between professors and students, and students will even compete with their teachers in sports.

Keywords: Winning psychology; Analeptic; Ideological and Political Education; Mental tension

1. Introduction

In the process of ideological and political education (PE) in colleges and universities, the rational application of winning psychology, the establishment of survival goals, and the stimulation of survival motivation among physical education students. Physical education students at colleges and universities have a solid attachment to victory, which may be utilized entirely in the Ideological and PE process to provide them with a clear direction of effort by setting goals relevant to their majors or purposes that they can easily reach after exerting effort (Devi, Gowtham, & Sharon, 2021). After selecting the objective, society must continue to promote and motivate sports students to reach the objective and encourage and stimulate their desire to survive in a timely manner. Set distinct goals for the differentiated growth of physical education pupils based on their unique qualities. Due to the increase in courses beyond college, retired students can better understand themselves and identify the activities in which they excel. From the standpoint of practical experience, sports students are proficient at track and field and have excellent interpersonal communication skills, organizational abilities, and managerial skills.

In this sense, the public sector must set unique goals for students based on a thorough understanding of their capabilities and serve as a role model to assist them in achieving and surpassing these goals. In this process, college and university counselor teams will be unable to detect the scenario. Therefore, in the process of helping the differentiated development of sports students, it requires not only the efforts of the management team of college student groups but also the coordination of various forces, such as employers and practical training bases, for students to develop more effectively (Shi et al., 2021). To ensure the continual consolidation of the effects of Ideological and PE, it is necessary to divide goals and encourage them on occasion. As college physical education students primarily participate in the party's technical self-discipline sports, and the duration of competitive self-discipline sports is frequently concise, even the longest marathon can run the entire process in only a few hours, the present goals of college physical education students are limited to a brief period, and they frequently do not have a longer-term personal development plan. They cannot alter this behavior quickly.

Yet, to aid their personal development, the goal of change can be broken down into smaller objectives that can be attained over a lengthy period, and strategies can be developed. Simultaneously, the ideological and PE content can be integrated into each day's standard, allowing students to obtain systematic ideological and PE instruction while achieving their objectives. Due to the psychological stimulus that will occur throughout the competition, it is vital to combine ideology with physical education. The specific psychological stress is

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illustrated in Figure 1 (Kobori et al., 2022). In practice, individuals can plan by creating personal development plans, identifying inadequacies, and assisting pupils in advancing. Thus, integrating physical education and

ideology and PE to reach a perfect intersection is an effective educational innovation measure for enhancing current college students' ideological and political quality.

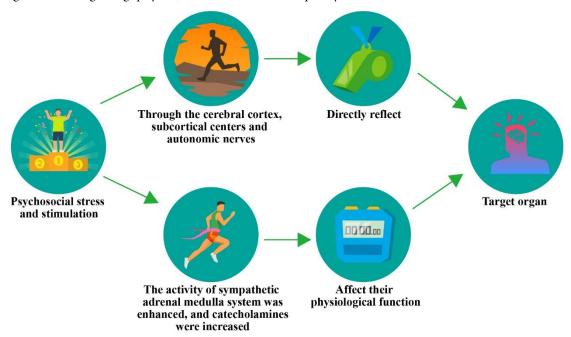


Figure 1. Generation of psychological tension stimulation

The expression of winning psychology in the studies and lives of college students majoring in physical education. College physical education students have a great interest in all hostile initiatives and a true desire to win competitive sports due to the existence of winning psychology. While multiple pupils practice order shooting on the basketball court, they should also compete for a high or a low, just as they should in all levels of sporting events and everyday interactions. This is a reflection of sports students' great drive to win. Still, when they cannot decide quickly between winning and losing, they frequently engage in more severe contradictions and sometimes violent fights, making ideological instruction more challenging (Bhattacharyya, Chanda, & De, 2020). Due to the existence of competitive psychology, it is challenging for college physical education students to attain perfect equality with others when forming interpersonal interactions. They continually seek to achieve dominance in interpersonal situations by utilizing their advantages. To attain this objective, they frequently employ extremely potent strategies to achieve their aims in the near term. To achieve this objective, college athletics will mainly exhibit two types of behavior, one of which is kind and positive.

For instance, if they discover that their classmates in the same dorm sprint faster than they do, some athletes would boost their training to better their grades. The alternative is a harmful and violent method. When some PE students

discover that their peers can't overcome them, they frequently don't have inferiority complexes like other students. Instead, they fight significantly for their unique advantages (Merz et al., 2006). As a result of the prevalence of competitive psychology, college physical education students have particular difficulties. As a result, they frequently establish objectives that are too lofty and cannot achieve them. But, if they exert effort, they will discover their shortcomings, which they will overcome (Guo et al., 2021). This study employs a questionnaire survey to collect data from 470 college students enrolled in a physical education institution. The objective is to comprehend the phenomenon of competitive psychology in the ideology and physical education of college students and examine the attitude of college students with competitive psychology toward the use of stimulants.

2. Literature Review

Since the 1940s, the Japanese government has emphasized that integrating school physical education and health education is a fundamental principle of national education. The primary objective of school physical education is to improve the nation's physical and health quality. The Japanese government renamed school sports "Health Sports" after World War Two. Thus, physical education and health education in Japanese schools are

centered on the "health sports model," and the training of physical education majors is turned into the "sports + health education health sports model." Kubota et al. (2021) concluded that to improve the teaching content and form of physical health education teachers' majors, which is to encourage the development of the strength of students majoring in health physical education teachers serving as health teachers. Zhang (2021) concluded, based on the requirements of national policy documents and the characteristics of school physical education in the new era, in his study on the cultivation of compound teachers of physical education and health education in regular colleges, that physical education in normal colleges must establish and implement the guiding ideology of health first, and should adapt to the development requirements of the times from an educational standpoint.

Fei and Ding (2021) concluded that the "healthy China" strategy introduced new requirements for school physical education, particularly for the needs of physical education teachers' group on the ability to promote and educate adolescents' physical health. In contrast, training these abilities was omitted from the traditional physical education professional talent training system. Xu and Tsai (2021) concluded that there were issues such as the lagging reform of the health curriculum system in colleges and universities, the lack of health knowledge, the outdated concept, and the illogical design of the health curriculum system. Yang (2022) stated that there are issues such as the inability of teacher strength to support the addition of appropriate courses, the increase in human resource expenses due to the introduction of teachers, and the lack of funding in colleges and universities. Therefore, under the current policy, it is impossible to pay for the expense of growing relevant health education courses, necessitating national policy support and university initiatives to provide genuine economic conditions for including multiple health education courses. Sun and Wang (2020) concluded that, against the backdrop of the new curriculum standards mandating the strengthening of the teaching of health education knowledge, and the predicament of physical education teachers' inadequacy in engaging in health education in the current actual teaching process, health education is not being adequately taught. Cheng et al. (2022), concluded that the primary implementers of health education activities in elementary and secondary schools are physical education teachers and school physicians. College majors in physical education are a significant source of physical education teachers for elementary and secondary schools. Physical education majors' comprehension and knowledge of health education determine the level of health education. It

analyzes the superiority of physical education in ideology and PE as well as the implementation of ideology and PE.

3. Methodology

Stimulants are the most common substance utilized in competitive situations. In the process of societal growth, this phenomenon appears not just in the sports business but in nearly every other human endeavor. In many human activities, there is a distinct phenomenon of making significant sacrifices to attain the highest goal within a given time frame. It is possible to say that this is the price humans have paid for their progress and evolution. Particularly in competitive sports, it cannot be said that using stimulants has resulted in today's outstanding sports outcomes and many illustrious records for human athletic prowess (Deng, 2021). Individuals cannot deny, however, that stimulants play a significant role in this. Figure 2 depicts the perception of the possible role of doping in sports.

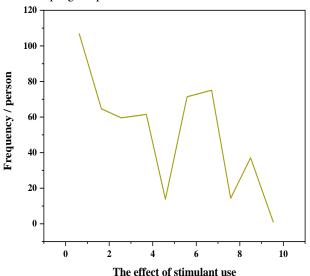


Figure 2. Cognition of the possible role of doping in sports

The use of stimulants endangers players' physical and mental health, disrupts sports fair competition, and erodes sports ethics, posing a significant risk to the general public in the realm of international sports. College students of the Physical Education Institute will be engaged in the training of grassroots athletes as teachers and coaches following their graduation. Their perspective on doping will significantly impact their work (Zeng & Liu, 2021). This study aims to examine college students' perceptions of doping and create a foundation for the control of doping at the grassroots level. Students are always in a condition of constant movement during physical education instruction, which substantially increases their freedom of

learning and receiving education and the environment but makes them particularly susceptible to influence from external forces. This allows students' attention, willpower, psychology, and ideological actions to be effectively demonstrated. Instructors should be adept at seizing opportunities and adopting specific teaching strategies and means to implement ideological and physical education instruction.

3.1 Research object

The focus of this study is the opinions of 470 college students against doping in physical education institutions. To understand the nature and dangers of stimulants and their usage, examine the journals and studies of stimulants and Anti-Doping education research via CNKI, and peruse the internet for relevant news articles on doping education. Read "Introduction to sports doping," "Anti-Doping reader for sports school students," and "genetic doping and competitive sports," as well as other publications on the subject. Examine the entirety of the "questionnaire on the attitude of collegiate athletes towards doping" when drafting the questionnaire (Si, 2022). For investigation, the questionnaire survey method and the athlete doping attitude scale (ASTD sport, for short) was utilized (Chen, 2022). This table is divided into nine subscales: behavior intention (BI), behavior attitude (AB), subjective standard (SN), subjective sense of control (PBC), behavior belief (BB), result evaluation (EC), standard belief (NB), obedience motivation (MC), and social approval (M-CS-D13) (Gao & Ai, 2021).

The findings of Mao Zhixiong's measurements with this scale indicate that the average alpha coefficient of each subscale of the tpb-8 factor model is 0.71, indicating that the dependability is barely adequate; The test findings for the structural formula model are x2/df = 3.36, NNFI = 0.87, AGFI = 0.87, CFI = 0.88, and RMSEA = 0.06. The structural validity is good overall. It demonstrates that this measure can detect doping attitudes and behavioral inclinations among athletes. The scale's total score ranges from -1 to 8. This study examines three subscales: standard belief (NB), subjective standard (SN), and obedience motivation (MO) (MC). Every survey information was statistically analyzed (Shang & Hu, 2021). Excel 2003 was used to compile the survey's statistics. SPSS 17.0 was used for the statistical analysis (Yu, Chen, & Wang, 2021).

4. Results and Discussion

Table 1 displays the gender differences in the doping attitudes of college students at the Physical Education Institute. This scale's total score varies between 1 to 8, with an average of 3.50 points. The greater the mean score, the

greater the propensity to utilize stimulants. The total average score of men and women is below the mean, and the real effective average score of men and women is substantially different (p<0.01), as shown in Table 1.

Table 1Results of doping use by college students of physical education by gender

Gender	Number	Effective average/points	
male	314	3.31±1.72	
female	156	2.76±1.42	
total	470	2.96±1.55	

Table 2 displays the age-related doping attitudes of college students at the Physical Education Institute. A positive skew in this table characterizes the age distribution. The scale's total average score is 2.96, which is lower than the average score of 3.50. Each age group has a distinct cumulative average score.

Table 2Scores of college students of physical education at different ages

800			
Age	Number	Effective average/points	
18	9	3.45±1.41	
19	25	3.39±1.54	
20	103	2.71±1.68	
21	202	3.05±1.60	
22	98	2.59±1.41	
23	28	2.36±1.53	
24	12	2.96±1.30	
25	1	2.27±0	
Total	470	2.96±1.55	

Table 3 shows the age division results of the doping attitude of college students in the Physical Education Institute. It can be seen from this table that the total average score is different, with the age of 20 as the dividing line (p<0.05).

Table 3Age division results of the doping attitude of college students at the Physical Education Institute

Age	Age Number Effective average/p	
≥20	436	2.92±1.57
< 20	34	3.30 ± 1.38

This study analyzes the standard belief (NB), subjective standard (SN), and obedience motivation (MC) of the athlete doping attitude scale, as well as the standard belief score, which indicates the amount to which influential individuals endorse doping. The obedience motivation score shows how much athletes obey "important

persons." The subjective standard score indicates the extent to which influential individuals believe they should use stimulants. Each scale's scores range from 0 to 1, with an average score of 0.50. The higher the score on the standard belief scale, the more significant the proportion of athletes who feel that influential individuals promote doping. The higher the subscale score for obedience motivation, the greater the athletes'

obedience to "important persons." The stronger the score on the subjective standard subscale, the greater the environmental pressure that pushes athletes to use stimulants; the greater the number of influential individuals who believe athletes should use stimulants. Each scale's scores range from 0 to 1, with an average score of 0.50. Table 4 displays the effective mean scores for the three subscales.

 Table 4

 Comparison of mean and difference of three different subscales

Gender	Number	Standard belief means*	The mean value of obedience motivation**	Subjective standard mean***
Male	314	0.499 ± 0.343	0.684±0.352	0.500 ± 0.336
Female	156	0.417 ± 0.290	0.779 ± 0.296	0.437 ± 0.326

Note: *t < t0.05 (400), take n=400. P>0.05** t=2.2040, t>t0.01(400), P<0.01; *** t=1.4108, t<t0.05 (400), p>0.05. The scores of each subscale are 0-1, with an average of 0.50.

There are age and gender disparities in attitudes regarding doping among college students (see tables 1-3). The data indicate that men are more inclined to embrace doping than women and are more willing to take risks, which may be a significant factor in why men outnumber women in positive instances. Regarding age, the average score of those under 20 is more excellent, the 21-year-old group is higher (excluding sampling mistakes), and the 18-year-old and 19-year-old groups have the highest scores, indicating a younger trend in stimulant usage.

According to reports, the reasons Chinese professional athletes use stimulants are becoming more complex as the economic level rises and more people pay attention to sports. The primary sources of pressure are 1) athletes' reasons; 2) Coach's pressure; 3) Peer influence demonstration; 4) Family influence; 5) Audience and public factors; 6) News media; 7) Sports management officials and sponsors; 8) Social, environmental factors; and 9) Social environment factors. Also applicable to nonprofessional athletes at the grassroots level are the ten variables listed above. They are more susceptible to external influences, especially those close to them, such as family members, coaches, teammates, "important people," etc., because they were once amateur athletes and young groups with low mental development levels, a weak cultural foundation, and little social experience.

Moreover, due to age, training years, training level, and other factors, the performance of non-professional athletes is more evident in certain aspects than that of professional athletes, which suggests that our focus at various stages is on athletes or their parents and coaches, depending on the different characteristics of athletes at multiple stages. From the perspective of athletes, they support using stimulants, which is also a significant reason why they use them

regularly. The community must always be aware of the position of these grassroots athletes, provide them with more care and support, and enhance their education so that they can accomplish outstanding outcomes through their genuine efforts.

There are significant variations between male and female college students concerning obedience motivation (p<0.01), showing that the sexes have different levels of obedience to "important persons." Girls are more likely to follow the orders of "important people." Still, both sexes score above the mean, indicating that they both believe that the influence of "important people" plays a crucial part in the usage of stimulants by athletes. Similarly, in the average score of standard beliefs, both male and female students believe that those who have a significant impact on themselves advocate doping, and this feeling is equally strong; the average score of both is close to 0.50, indicating that both male and female college students believe that this is a significant factor in their use of doping.

The average score of both men and women on the subjective standard subscale is close to 0.50, and the difference is not statistically significant, indicating that both men and women believe that the environmental pressure that encourages athletes to use stimulants is more critical, which is a fundamental reason for athletes to use stimulants. The issue with college students and stimulants remains unchanged. Youth amateur athletes in middle and elementary schools, ages 8 to 16, receive minimal training on stimulants at sports schools and youth groups. Teachers, parents, and possibly club coaches play a significant role in their lives. The attitudes of these influential figures about doping are instilled in adolescents and influence the values of athletes. During adolescence, any suspicion of doping will significantly impact

adolescents' athletic careers, which is a crucial time. For players, particularly student-athletes, the community should boost education, confidence training, and nutritional supplementation and administer placebos when necessary to promote sports confidence. As the education provider, schools should increase the ideological education of student-athletes and the communication with athletes so that they can resist doping intentionally and avoid it.

Table 4 reveals that female students in physical education colleges are likelier to obey the arrangement of "important people" in obedience motivation. Still, both sexes score above the mean, indicating that they believe the influence of "important people" plays a crucial role in athletes' use of stimulants. Young athletes consider coaches who get along with them day and night to be "essential persons." The attitude of coaches about the use of stimulants by sportsmen has a direct effect on minor athletes. Similarly, both male and female students hold the usual notion that those who have a significant impact on themselves favor doping, and this sentiment is equally strong. Male and female college students agree that this is essential to their doping practices. The subjective standard subscale reveals that the average score of both men and women is close to the mean, indicating that both men and women believe that the environmental pressure that encourages athletes to use stimulants is more significant, which is also a fundamental reason for athletes to use stimulants.

This demonstrates the significance of coaches and the relevance of enhancing their professional ethics education and providing them with regular anti-doping instruction and training. Improve the management of coaches and routinely conduct anti-doping education and training; Increase the supervision of other relevant athletes' service staff, including team doctors and other personnel who may be exposed to doping. It is not difficult to conclude from the research findings that stimulant usage should be motivated by various subjective and objective factors, as well as the influence of others. This is shared by other academics who believe that numerous athletes take stimulants, mainly for three reasons: 1) drug reasons: it is effective, it is not on the list of limited use and prohibition, and the body is dependent on the drug; 2) Personal reasons: lack of awareness of the ill effects of drugs, lack of self-confidence, taking risks, desire to decrease anxiety and pressure, the belief that others are also using drugs, and susceptibility to the influence of others; 3) Environmental factors, such as an athlete's cultural background and upbringing, friends or teammates that use drugs, etc. The most essential of these factors is the need to increase athletes' and coaches' awareness and knowledge framework regarding doping.

5. Conclusion

There are numerous reasons why athletes utilize stimulants. The influence of "important individuals" such as coaches, athletes' motivations, environmental pressure (including familial and societal factors), and other factors compel athletes to utilize all methods possible to enhance their performance. The use of stimulants is a quick and effective strategy. The group that uses impulses is typically younger and less professional. Males are more prone than girls to use or accept doping, suggesting that communities should approach them differently when enhancing oversight. Doping affects athletes at different stages of a sports career, with the most significant impact occurring at the beginning of a career. Therefore, society should do an excellent job of educating beginning and grassroots athletes to keep them away from doping and compete healthily. Physical education in colleges and universities is of tremendous and far-reaching strategic importance to students' ideological and physical development, as colorful sports activities can cultivate students' patriotism and positive competitive awareness and serve as an adjustment mechanism. Society should take into account the actual situation of sports work, give full play to the role of sports teachers, and make full use of sports competitions and campus cultural construction to enrich and improve students' knowledge, ability, and quality, so that they can develop a broader perspective, a more noble mind, a deeper understanding, and ultimately become qualified modern talents.

The winning psychology of college students in physical education refers to the psychological performance that physical education students should prioritize above all else. The winning mindset will cause college physical education students to be more impatient while dealing with interpersonal connections, learning activities, and personal planning, which will frequently result in several preventable errors. Students can accurately comprehend and utilize the psychology of winning if they are guided, which will also improve their performance in ideological and physical education classes.

In sports, verbal or physical contact and confrontation among pupils are inevitable. Instructors should watch students' words and actions, identify difficulties promptly and precisely, and use the chance to remedy problems to teach pupils. For instance, in football matches, because the illegal activities of the players are very likely to cause conflicts between the two sides, teachers should educate both sides from various perspectives: for the foul players, it is dishonorable and immoral to use foul methods even if they win the game; for the person who has been fouled, he

must understand that the rules do not prohibit violations, but those who commit them. Then, promote the students' civilized, law-abiding, and polite ideological qualities.

6. Theoretical Implications, Practical Implications, and Future Directions

This research is theoretically significant since it has introduced new aspects connected to the physical education of college students. The pupils' education has a significant impact on their work. In a sophisticated manner, work dependability can be increased. Students seeking the finest possible physical education must improve their work accordingly. Nonetheless, the support of coaches and teachers substantially affects student success. The coaches are obliged to work positively to enhance the pupils' personalities. The relationship between the coach and the students must be strengthened to produce their best work and improve their performance. This study indicated that coaches must train students in an

advanced manner to enhance their careers. For the pupils' improved work ethic, it is necessary to provide them with an education suited to their individuality. A coach's inattention can negatively impact students' performance. Hence, a coach's relationship with students must be cordial. In addition, the student's performance must be moderately enhanced by working on their PE and physical education.

The study has made extensive prior citations to its findings. Yet, there is still a need for further examination in this field of study. Researchers are expected to work on the development objectives to improve gamers' health. To ensure the validity of these findings, it is necessary to enlarge the sample size and collect data from more regions. In addition, modifying and mediating influences should be included in this research to enhance their efficacy. Further research is required to investigate the data with qualitative investigations to identify the new aspects that could aid kids' improved learning and game performance following the epidemic.

References

- Bhattacharyya, A., Chanda, M., & De, D. (2020). Analysis of noise-immune dopingless heterojunction bio-tfet considering partial hybridization issue. *IEEE Transactions on Nanotechnology*, 19, 769-777. https://doi.org/10.1109/TNANO.2020.3033966
- Chen, T. (2022). Research on the dilemma and breakthrough path of ideological and political education in colleges and universities in the era of big data. *Journal of Higher Education Research*, *3*(2), 203-206. https://doi.org/10.32629/jher.v3i2.757
- Cheng, P., Yang, L., Niu, T., & Li, B. (2022). On the ideological and political education of material specialty courses under the background of the internet. *Journal of Higher Education Research*, *3*(1), 79-82. https://doi.org/10.32629/jher.v3i1.644
- Deng, J. (2021). Research on effectiveness of colleges ideological and political education in the age of big data. *Journal of Physics: Conference Series*, 1744(3), 032058. https://doi.org/10.1088/1742-6596/1744/3/032058
- Devi, S. S., Gowtham, V., & Sharon, B. J. (2021). Daily stress classification using functional near infrared spectroscopy. *Journal of Physics: Conference Series, 1916*(1), 012161. https://doi.org/10.1088/1742-6596/1916/1/012161
- Fei, Z., & Ding, L. (2021). Research on teaching innovation of basic courses of ideological and political education in universities integrating computer multimedia technology. *Journal Of Physics: Conference Series*, 1744(4), 042123. https://doi.org/10.1088/1742-6596/1744/4/042123
- Gao, Q., & Ai, L. (2021). Problems of ideological and political education of college students in the era of big data. *Journal of Physics: Conference Series*, 1852(3), 032037. https://doi.org/10.1088/1742-6596/1852/3/032037
- Guo, C., Tian, K., Wang, L., Liang, F., Wang, F., Chen, D., Ning, J., Zhong, Y., & Hu, Y. (2021). Approach of fermi level and electron-trap level in cadmium sulfide nanorods via molybdenum doping with enhanced carrier separation for boosted photocatalytic hydrogen production. *Journal of Colloid and Interface Science*, 583, 661-671. https://doi.org/10.1016/j.jcis.2020.09.093
- Kobori, H., Sogabe, M., Hoshino, A., Taniguchi, T., & Shimizu, T. (2022). Magneto-Transport Properties and Hole Self-Doping due to Excess Oxygen Addition in Polycrystalline LaMnO3. *Materials Science Forum*, 1053, 55-60. https://doi.org/10.4028/p-90n56r
- Kubota, K., Fujitani, N., Yoda, Y., Kuroki, K., Tokita, Y., & Komaba, S. (2021). Impact of Mg and Ti doping in O3 type NaNi 1/2 Mn 1/2 O 2 on reversibility and phase transition during electrochemical Na intercalation. *Journal of Materials Chemistry A*, *9*(21), 12830-12844. https://doi.org/10.1039/D1TA01164B
- Merz, M., Reutler, P., Büchner, B., Arena, D., Dvorak, J., Idzerda, Y., Tokumitsu, S., & Schuppler, S. (2006). O1s and Mn2p NEXAFS on single-layered La 1-x Sr 1+ x MnO 4: crystal field effect versus orbital coupling mechanism. *The European Physical Journal B-Condensed Matter and Complex Systems*, 51, 315-319. https://doi.org/10.1140/epjb/e2006-00228-4

- Shang, H., & Hu, C. (2021). Value Orientation and Development of Ideological and Political Education Based on Artificial Intelligence. *Journal of Physics: Conference Series*, 1852(2), 022083. https://doi.org/10.1088/1742-6596/1852/2/022083
- Shi, H., Ye, X., Zhang, J., Wu, T., Yu, T., Zhou, C., & Ye, J. (2021). A thermostability perspective on enhancing physicochemical and cytological characteristics of octacalcium phosphate by doping iron and strontium. *Bioactive Materials*, 6(5), 1267-1282. https://doi.org/10.1016/j.bioactmat.2020.10.025
- Si, Y. (2022). On the influence of party history education on ideological and political education for medical students. *Journal of Higher Education Research*, 3(2), 141-145. https://doi.org/10.32629/jher.v3i2.741
- Sun, X., & Wang, K. (2020). Reflection on the influence of entertainment of mass culture on ideological and political education of college students. *International Journal of Social Science and Education Research*, *3*(5), 93-97. https://doi.org/10.6918/IJOSSER.202005-3(5).0015
- Xu, L., & Tsai, S.-B. (2021). The transformation of college students' ideological and political education and learning analysis of education system by streaming media technology. *Mathematical Problems in Engineering*, 2021, 1-11. https://doi.org/10.1155/2021/3285830
- Yang, L. (2022). On the Application of Practical Exercise Method in the Ideological and Political Education of College Students. *Open Access Library Journal*, 9(5), 1-7. https://doi.org/10.4236/oalib.1108790
- Yu, L., Chen, Y., & Wang, L. (2021). Bibliometric analysis of research literature on ideological and political education by curriculum based on SATI. *Journal of Physics: Conference Series*, 1852(4), 042072. https://doi.org/10.1088/1742-6596/1852/4/042072
- Zeng, F., & Liu, L. (2021). Improving the quality of ideological and political education in colleges and universities in big data age. *Journal of Physics: Conference Series*, 1852(3), 032034. https://doi.org/10.1088/1742-6596/1852/3/032034
- Zhang, Y. (2021). The influence of ideological and political education on employment quality of college students based on association rule analysis. *Journal of Physics: Conference Series, 1744*(4), 042169. https://doi.org/10.1088/1742-6596/1744/4/042169