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Considering the Impact of a 12-Week Intervention Program on Behavioral Intentions and Key Health-Related Constructs in Adolescent Basketball Players

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Abstract

Objectives. This study aimed to evaluate the impact of a 12-week basketball intervention program on adolescents' behavioral intentions and key health-related constructs, including self-efficacy, social support, situational factors, and outcome expectations, based on the social cognitive theory (SCT), focusing on each gender and comparing both genders.

Materials and methods. A total of 175 adolescents (age: 12–14 years old) from basketball clubs in Guangxi Province, China, were involved in the study. The partcipants were divided by gender into two groups (male [n = 88] and female [n = 87] groups) and underwent an intervention program for 12 weeks. The validity and reliability of all measurements were tested. Regression analysis was used to identify predictors of behavioral intentions, which were used to design the intervention program.

Results. The intervention significantly improved self-efficacy, social support, situational factors, outcome expectations, and behavioral intentions in both male and female adolescents. Behavioral intentions score increased from 3.19 to 3.77 for male adolescents and from 3.3 to 4.27 for female adolescents ($p < 0.001$). Furthermore, it was noted an increase in self-efficacy scores from 3.51 to 4.22 for male adolescents and from 3.26 to 4.23 for female adolescents ($p < 0.001$). Improvements in other constructs were also observed in both genders, with no significant gender differences in post-intervention outcomes ($p > 0.05$).

Conclusions. The findings indicate that a 12-week intervention program based on the SCT effectively enhanced adolescents' behavioral intentions and related constructs. Developing gender-specific intervention programs is important for maximizing intervention effectiveness.

Keywords: behavioral intentions, basketball training, self-efficacy, social support, situation, outcome expectations.

Introduction

The participation in sports has a positive impact on the mental health and subjective well-being of school-aged children and adolescents, particularly regular physical activities that enhance emotional regulation and social support (Liu et al., 2022). However, many adolescents fail to meet recommended levels of physical activity (PA) due to academic pressures and developmental complexities (Guthold et al., 2020). Participation in youth sports positively impacts children's health and well-being; however, barriers such as limited resources and lack of familial support often hinder full participation in sports activities (Kuhn et al., 2021).Social Cognitive Theory (SCT) provides a robust framework for understanding and predicting adolescents' sports participation (Bandura, 1997). The social cognitive theory model can moderately predict adolescent physical activity; self-efficacy, barrier self-efficacy, social support, and social status are key indicators for predicting physical activity (Liu et al., 2020).

Gender differences are prevalent in the field of mental health, particularly among adolescents, with females generally experiencing higher levels of psychological distress and lower life satisfaction. However, this gender gap exhibits significant heterogeneity across different countries and cultural contexts (Campbell, Bann, & Patalay, 2021).Gender differences significantly impact sports participation, and challenges in training time and support mechanisms disproportionately affect girls (Fredricks & Eccles, 2006). In particular, PST

interventions that focus on self-efficacy and observational learning have been shown to promote PA participation (Islam et al., 2023). Technology-based solutions, such as mobile apps, have proven effective in delivering flexible and engaging PST interventions (Wekesser et al., 2021). However, psychological research on sports and exercise continues to exhibit a significant gender imbalance, and male participants are overrepresented, particularly in experimental studies in Europe (Walton et al., 2022). Therefore, more inclusive and representative approaches are required in future research.

Gender-sensitive approaches are essential, as societal and structural factors shape girls' participation in PA. Peer and family support, along with individual and social motives like enjoyment and achievement, sustain engagement in sports (Wang, 2024). Additionally, the quality of coaching and adequate facilities are critical factors for sustaining participation. SCT-based educational interventions enhance PA levels among female students in high school by improving self-efficacy, family support, and self-regulation (Hashemian et al., 2021). Similarly, SCT is widely used in strength training programs, particularly those led by exercise specialists in community settings (Ma et al., 2022). Physical performance in basketball is also influenced by individual characteristics. Gender-sensitive approaches are essential, as societal and structural factors significantly impact girls' participation in PA. Peer and family support are crucial for sustained engagement (Schlund et al., 2021; Zhang et al., 2022; Sheikh et al., 2022). Leaner adolescent basketball players tend to perform better because body size and individual characteristics play a more significant role than training factors like club characteristics or training volume (Guimarães et al., 2023). Interventions addressing gender differences in PA significantly improve participation for both boys and girls, with better gender-specific research leading to more consistent results (Schulze et al., 2021). Psychological factors, such as capacity and opinion comparisons, significantly affect junior athletes' motivation, self-efficacy, and performance in training, competition, and rehabilitation (Raievska et al., 2024).Gender differences in motivation impact PA levels, and males tend to exhibit higher intrinsic and extrinsic motivation than females (Sáez et al., 2021). In addition, mindfulness-based interventions combined with an SCT approach have been shown to significantly improve self-efficacy and dietary adherence among individuals with Type 2 Diabetes Mellitus (Harmiardillah et al., 2020). This suggests that similar strategies could enhance adolescents' self-efficacy and participation in basketball.

Interventions combining goal setting and physical training have proven effective. For example, a combination of SMART goal setting and core strength training was more effective than either approach alone in improving adolescents' fitness and exercise attitudes (Lu et al., 2022). Similarly, while enjoyment did not significantly change over a 12-week exergaming intervention, it was significantly higher during exergaming sessions compared to physical education classes, influenced by factors such as BMI and weekly PA levels (Röglin et al., 2023). Autonomous motivation during school recess and positive attitudes toward PA were key predictors of intentions toward physical activity, and they mediate the relationship between motivation and behavioral intentions (Pasi et al., 2021).Goal orientation and self-efficacy significantly influence adolescent athletes' performance and behavioral intentions, particularly in managing competitive cognitive anxiety. Task orientation and low ego-orientation help buffer anxiety's impact on performance, while self-efficacy remains key to improving both performance and intentions (Peng & Zhang, 2023). Self-efficacy and goal changes significantly moderate the decline in physical activity during adolescence, particularly in students who maintain high self-efficacy beliefs, where changes in goals may have differing effects on physical activity (Dishman et al., 2019). Self-efficacy plays a mediating role between modeling after role models and achieving a flow state, demonstrating its importance in enhancing adolescent athletes' performance during sports activities (Lee, Kwon, & Ahn, 2021). Globally, 80% of adolescents are insufficiently active, with excessive screen time contributing to cardiovascular and mental health disorders (Van Sluijs et al., 2021). In order to improve PA, solutions should focus on supportive schools, social and digital environments, and multi-use urban spaces. Team sports like basketball are associated with fewer mental health issues, such as anxiety and depression, compared to individual sports (Hoffmann et al., 2022), and they predict reduced symptoms of depression and anxiety over time (Graupensperger et al., 2021). Additionally, positive attitudes toward physical education, parental support, and active transportation to school are strong predictors of PA participation (Rullestad et al., 2021).Adolescent athletes in contact sports show higher competitive aggression, while self-esteem predicts affiliation in non-contact sports athletes, suggesting that psychological constructs like emotional regulation and self-esteem play a key role in adolescent sports behavior and interventions (Huđin, Glavaš, & Pandžić, 2020).

The Theory of Planned Behavior (TPB) highlights that attitudes, subjective norms, and perceived behavioral control positively influence adolescents' participation in PA, which then leads to actual participation (Baek et al., 2020). Prior knowledge enhances attitudes and intentions, highlighting the importance of education and marketing in promoting sports. The Teaching Personal and Social Responsibility (TPSR) model significantly increases personal and social responsibility, prosocial behavior, and self-efficacy in youth soccer players compared to conventional methods (Carreres-Ponsoda et al., 2021). Reflective (e.g., intention stability and perceived control) and automatic motivation (e.g., identity) are key moderators of the intention-PA relationship, which explain the gap between intention and participation (Rhodes et al., 2022).

In conclusion, this 12-week SCT-based intervention aims to enhance self-efficacy, adjust outcome expectations, and strengthen social support and self-regulation among adolescent basketball players in Guangxi Province, China. By examining gender-specific responses, the study offers insights for developing gender-sensitive sports programs. Team sports, like basketball, are associated with fewer mental health issues and lower anxiety and depression over time. Addressing gender differences and leveraging SCT strategies can enrich the evidence for inclusive youth sports programs across diverse cultures.

Materials and Methods

Study Participants

The participants who met the inclusion criteria totaled 175 adolescents aged 12 to 14 years old and belonged to basketball clubs in Guangxi Province and were divided

into male (n = 88) and female (n = 87) groups. The study objectives and procedures were explained to the participants who subsequently provided written informed consent. This study was approved by the Mahasarakham University Ethics Committee (Approval number: 121-071/2024).

Inclusion Criteria

1. Male and female adolescents aged 12–14 years from clubs in Guangxi Province who are actively engaged in basketball training.
2. Participants have training experience in their basketball clubs for an average of approximately 2.4 years.

Exclusion Criteria

Players with physical injuries, chronic illnesses, or other medical conditions that may hinder their full participation in basketball training or intervention activities.

Players who had missed more than 30% of their training sessions in the past three months.

Study Design

This study was a quasi-experimental design with a single experimental group stratified by gender to analyze the effects of the intervention. The experimental group participated in a structured 12-week basketball intervention program, conducted twice a week for 90 minutes per session. The intervention activities included targeted training, team-based activities, and parental support components aimed at improving self-efficacy, strengthening peer and parental support, and aligning outcome expectations with the SCT principles (Table 1).

Research Instruments

The research instrument for this study consisted of a revised questionnaire based on the SCT, focusing on five key dimensions: self-efficacy, social support, situational factors, outcome expectations, and behavioral intentions. The questionnaire was validated through a pilot test conducted with 100 participants. The test demonstrated high reliability (Cronbach's α: 0.896–0.974) and validity (Kaiser–Meyer–Olkin test: 0.972, Bartlett's test of sphericity $\chi^2 = 18107.471$, $p < 0.001$). These adjustments ensured the instrument's appropriateness and accuracy for assessing adolescents' behavioral intentions in basketball training.

Statistical Analysis

General information is described using descriptive statistics (such as frequency, percentage, mean, and standard deviation). The Shapiro-Wilk test was conducted to examine the distribution of the data. Differences between results before and after the experiment were analyzed using paired sample t-tests and that between the results of the male and female groups were analyzed using independent sample t-tests. The level of statistical significance was set at 0.05.

Results

In this study, 175 adolescent basketball players participated in a 12-week intervention program aimed at enhancing behavioral intentions and key health-related constructs. The sample was nearly evenly divided by gender, comprising 50.29% males (n=88) and 49.71% females (n=87). The average age was similar across genders, with males averaging 13.21 years (standard deviation = 0.46) and

Table 1 Factor interventions for male and female adolescents

	Week	Intervention Item	Activity	Time	Content
Male	Weeks 1–4	Social Support (Q3)	Family day activities	3rd week of the 1st and 2nd months, Wednesday evening, 6:00–9:00 PM	Parent-child basketball games, family interaction with the coach, and activities for parents to observe and interact.
	Weeks 1–4	Situation (Q16)	Coach Training	2nd week of the 1st and 2nd months, Friday evening, 6:00–9:00 PM	Provide training and communication skills courses for coaches.
	Weeks 1–12	Self-Efficacy (Q25)	Psychological counseling	After training every Tuesday	Role model selection, positive feedback, and support methods.
	Weeks 1–12	Outcome Expectations (Q36)	Time management training	1st week of each month, Thursday evening, 6:00–7:30 PM	Provide time management and study skills training.
Female	Weeks 1–4	Situation (Q16)	Coach training	2nd week of the 1st and 2nd months, Friday evening, 6:00-9:00 PM	Provide training and communication skills courses for coaches.
	Weeks 1–12	Self-Efficacy (Q25)	Confidence-building courses	After training every Tuesday	Group discussions and counseling sessions.
	Weeks 5–8	Outcome Expectations (Q30)	Reward system	1st week of each month, Thursday evening, 6:00–7:30 PM	Implement a reward program with parental involvement.

Table 2. Characteristics of study participants (n = 175)

Variables	Numbers (Percentage)	
Gender	Male (n = 88)	Female (n = 87)
	50.29 %	49.71 %
Age (years)	13.21 ± 0.46	13.01 ± 0.28
Experience in basketball training		
1 year and below	11	32
1–2 years	14	24
2–3 years	19	19
3–4 years	15	7
4–5 years	10	2
More than 5 years	19	2
Frequency of basketball training time		
4 hours and below	27	50
4–8 hours	13	23
8–12 hours	9	7
More than 12 hours	39	6

females 13.01 years (standard deviation = 0.28).Key findings revealed that male participants had a more diverse range of basketball training experiences, with a significant proportion (21.6 %) having more than five years of training. In contrast, a larger percentage of female participants (36.8 %) had one year or less of training experience. Additionally, males were more likely to engage in extensive weekly training, with 44.3 % training more than 12 hours per week compared to only 6.9 % of females. Conversely, the majority of female participants (57.5 %) trained four hours or less weekly.

Table 3 presents the pre- and post-intervention mean scores for the SCT constructs by gender. The intervention significantly improved all constructs ($p < 0.001$), with female adolescents showing particularly notable improvements in behavioral intentions and self-efficacy. For example, behavioral intention scores increased from 3.3 to 4.27 in female adolescents and from 3.19 to 3.77 in male adolescents.

Table 4 compares gender differences in social support, outcome expectations, and behavioral intentions. For pre-intervention, these constructs showed no statistically significant differences between genders (social support: $p = 0.2$; outcome expectations: $p = 0.099$; and behavioral intention: $p = 0.72$). For post-intervention, although scores for both genders increased, the differences remained statistically insignificant (social support: $p = 0.34$; outcome expectations: $p = 0.66$; and behavioral intention: $p = 0.86$).

Table 5 further compares the changes in situational factors and self-efficacy between genders. Prior to the intervention, the differences between male and female adolescents were not statistically significant (situational factors: $p = 0.14$; self-efficacy: $p = 0.18$). Post-intervention, both genders demonstrated significant improvements,

Table 3. Comparing pre-test and post-test scores for each gender after 12 weeks of intervention

Variables	Male			Female		
	Pre-test	Post-test	p-value	Pre-test	Post-test	p-value
Social Support	3.42	4.09	0.001	3.21	4.18	0.001
Situational factors	3.57	4.37	0.001	3.39	4.12	0.001
Self-efficacy	3.51	4.22	0.001	3.26	4.23	0.001
Outcome Expectations	3.59	4.24	0.001	3.36	4.05	0.001
Behavioral intention	3.19	3.77	0.001	3.3	4.27	0.001

$p < 0.05$, significant

Table 4. Comparison of social support, outcome expectations, and behavioral intention between genders after 12 weeks of intervention

Variable	Pre-test		p-value	Post-test		p-value
	Male	Female	Pre-test between genders	Male	Female	Post-test between Genders
Social Support	3.37	3.17	0.20	4.05	4.16	0.34
Outcome Expectations	3.59	3.35	0.09	4.24	4.29	0.66
Behavioral intention	3.19	3.24	0.72	3.77	3.79	0.86

Table 5. Comparison of situational factors and self-efficacy between genders after 12 weeks of intervention (cont.)

Variable	Pre-test		p-value	Post-test		p-value
	Male	Female	Pre-test between genders	Male	Female	Post-test between genders
Situational factors	3.57	3.35	0.144	4.34	4.36	0.80
Self-efficacy	3.52	3.32	0.185	4.24	4.28	0.69

but the differences between male and female adolescents remained insignificant (situational factors: $p = 0.80$; self-efficacy: $p = 0.69$).

Discussion

Post-intervention, behavioral intention scores increased from 3.19 to 3.77 for males and from 3.3 to 4.27 for females ($p < 0.001$). This improvement supports recent studies that behavioral intention is a key predictor of PA participation among adolescents (Liu et al., 2022). Our intervention, which included psychological counseling, family day activities, and a reward system, effectively boosted intentions, particularly among females. This finding is consistent with Schulze et al. (2021), who found that gender-sensitive interventions narrow the gender gap in PA participation. Additionally, Zhang et al. (2022) emphasized that social support and self-efficacy are critical predictors of behavioral intentions, which aligns closely with our intervention design.

Self-efficacy scores significantly improved post-intervention (from 3.51 to 4.22 for males and from 3.26 to 4.23 for females) ($p < 0.001$). This aligns with recent research emphasizing the importance of self-efficacy in PA participation among adolescents (Zhang et al., 2022). Our intervention enhanced self-efficacy through role models, positive feedback, and support methods. Notably, females showed greater improvement in self-efficacy, likely due to the confidence-building group discussions and psychological counseling tailored to them. This contrasts with Sáez et al. (2021), who found higher self-efficacy in males, suggesting that targeted interventions can help females achieve comparable improvements.

Social support scores significantly increased post-intervention (from 3.42 to 4.09 for males and from 3.21 to 4.18 for females ($p < 0.001$). This aligns with Zhang et al. (2022), who highlighted the importance of family and peer support in sustaining adolescent PA participation. Our intervention strengthened support networks through family day activities and coach training. Additionally, situational factor scores improved significantly, increasing from 3.57 to 4.37 for males and from 3.39 to 4.12 for females ($p < 0.001$). This is consistent with Guimarães et al. (2023), who noted that training experience and environmental support influence performance. Our intervention addressed these factors through time management training and a reward system, helping adolescents balance academics and sports.

Outcome expectation scores significantly improved post-intervention (from 3.59 to 4.24 for males and from 3.36 to 4.05 for females) ($p < 0.001$). This aligns with Lu et al. (2022), who found that goal setting and reward mechanisms significantly enhance adolescents' motivation and outcome expectations. Our intervention, which included time management training and a reward system, helped adolescents clarify their goals and the significance of sports, thereby boosting their outcome expectations.

Although both male and female adolescents showed significant improvements across all constructs post-intervention, gender differences were not statistically significant ($p > 0.05$). This contrasts with Fredricks and Eccles (2006), who noted more barriers to PA participation for females. Our study, however, demonstrates that gender-sensitive interventions, such as confidence-building courses for females and family-oriented activities for males, can effectively narrow the gender gap. This is consistent with Schulze et al. (2021), who highlighted the positive impact of such approaches on PA participation.

Conclusion

This 12-week intervention program significantly improved adolescents' social support, situational adaptability, self-efficacy, outcome expectations, and behavioral intentions in both genders. Although the gender differences in intervention effects were minimal, female adolescents demonstrated more substantial improvements in some dimensions, underscoring the importance of gender-sensitive intervention designs. The study findings further support the application of the SCT in understanding and enhancing behavioral intentions for sports participation. Future interventions should consider incorporating more tailored approaches to maximize adolescents' engagement and outcomes in sports training programs.

Recommendations

Recommendations for the study implication:

1. The findings suggest that schools in China, particularly in Guangxi Province, can adopt basketball intervention programs based on the SCT to promote adolescents' participation in physical activities.
2. A structured and targeted intervention program (e.g., enhancing social support, situational adaptability, and self-efficacy) can significantly improve adolescents' behavioral intentions and participation in basketball training.

Recommendations for further research:

1. Future studies should focus on the long-term effects of SCT-based intervention programs on adolescents' sports participation and overall health to assess the sustainability of behavioral changes.
2. Further research could explore the integration of technology (e.g., mobile apps or online platforms) into intervention programs to provide flexible and scalable delivery methods.
3. Expanding the study to include more diverse regions and age groups in China would provide a broader understanding of how SCT-based interventions influence adolescents' sports behavior and intentions across different cultural and demographic contexts.

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Conflict of Interest

The authors declare that there is no conflict of interest.

References

Liu, J., Zeng, M., Wang, D., Zhang, Y., Shang, B., & Ma, X. (2022). Applying social cognitive theory in predicting physical activity among Chinese adolescents: A cross-sectional study with multigroup structural equation model. *Frontiers in Psychology,* 12, 695241. https://doi.org/10.3389/fpsyg.2021.695241

Guthold, R., Stevens, G. A., Riley, L. M., & Bull, F. C. (2020). Global trends in insufficient physical activity among adolescents: A pooled analysis of 298 population-based surveys with 1.6 million participants. *The Lancet Child & Adolescent Health, 4*(1), 23-35. https://doi.org/10.1016/S2352-4642(19)30323-2

Kuhn, J.H., Adkins, S., Agwanda, B. et al. (2021). Taxonomic update of phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales. *Archives of Virology, 166*(12), 3513-3566. https://doi.org/10.1007/s00705-021-05143-6

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, NY: Freeman.

Liu, J., Shang, B., Yin, Y., Yang, M., Zeng, M., Zhang, Y., & Ma, X. (2020). Analysis of the influence factors of adolescents' physical activity based on the perspective of social cognitive theory. *Journal of Shanghai University of Sport, 44*(5), 70-80. https://doi.org/10.16099/j.sus.2020.05.008

Campbell, O. L. K., Bann, D., & Patalay, P. (2021). The gender gap in adolescent mental health: A cross-national investigation of 566,829 adolescents across 73 countries. *SSM - Population Health,* 13, 100742. https://doi.org/10.1016/j.ssmph.2021.100742

Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*(4), 698-713. https://doi.org/10.1037/0012-1649.42.4.698

Islam, K. F., Awal, A., Mazumder, H., Munni, U. R., Majumder, K., Afroz, K., Tabassum, M. N., & Hossain, M. M. (2023). Social cognitive theory-based health promotion in primary care practice: A scoping review. *Heliyon, 9*(4), e14889. https://doi.org/10.1016/j.heliyon.2023.e14889

Wekesser, M. M., Harris, B. S., Langdon, J., & Wilson, C. H. (2021). Coaches' impact on youth athletes' intentions to continue sport participation: The mediational influence of the coach–athlete relationship. *International Journal of Sports Science & Coaching, 16*(3), 359-372. https://doi.org/10.1177/1747954121991817

Walton, C. C., Gwyther, K., Gao, C. X., Purcell, R., & Rice, S. M. (2022). Evidence of gender imbalance across samples in sport and exercise psychology. *International Review of Sport and Exercise Psychology, 17*(2), 1337-1355. https://doi.org/10.1080/1750984X.2022.2150981

Hashemian, M., Abdolkarimi, M., Asadollahi, Z., & Nasirzadeh, M. (2021). Effect of "Social Cognitive Theory"-based intervention on promoting physical activity in female high-school students of Rafsanjan city, Iran. *Journal of Education and Community Health, 8*(2), 111-119. https://doi.org/10.52547/jech.8.2.111

Ma, J. K., Leese, J., Therrien, S., Hoens, A. M., Tsui, K., & Li, L. C. (2022). A scoping review of interventions to improve strength training participation. *PLOS ONE, 17*(2), e0263218. https://doi.org/10.1371/journal.pone.0263218

Schlund, A., Reimers, A. K., Bucksch, J., Linder, S., & Demetriou, Y. (2021). Sex/gender considerations in school-based interventions to promote children's and adolescents' physical activity: A systematic review. *Ger J Exerc Sport Res, 51*(3), 257-268. https://doi.org/10.1007/s12662-021-00724-8

Zhang, M., Wang, X.-C., & Shao, B. (2022). Predictors of persistent participation in youth sport: A systematic review and meta-analysis. *Frontiers in Psychology,* 13, 871936. https://doi.org/10.3389/fpsyg.2022.871936

Sheikh, M., Bay, N., Ghorbani, S., & Esfahaninia, A. (2022). Effects of social support and physical self-efficacy on physical activity of adolescents. *International Journal of Pediatrics, 10*(4), 15823-15834. https://doi.org/10.22038/IJP.2022.62762.4793

Guimarães, E., Baxter-Jones, A. D. G., Williams, A. M., Tavares, F., Janeira, M. A., & Maia, J. (2023). The effects of body size and training environment on the physical performance of adolescent basketball players: The INEX study. *Annals of Human Biology, 50*(1), 26-34. https://doi.org/10.1080/03014460.2023.2169759

Schulze, C., Bucksch, J., Demetriou, Y., Emmerling, S., Linder, S., & Reimers, A. K. (2021). Considering sex/gender in interventions to promote children's and adolescents' leisure-time physical activity: A systematic review and meta-analysis. *Journal of Public Health, 69*(4), 1-12. https://doi.org/10.1007/s10389-021-01625-8

Raievska, Y., Savchuk, O., Hulias, I., Khokhlov, A., Hoian, I., Syniakova, V., Soroka, O., & Lukashov, O. (2024). Mechanism of comparison in the structure of self-efficacy in junior athletes' sporting activities. *Journal of Physical Education and Sport, 24*(6), 1349-1359. https://doi.org/10.7752/jpes.2024.06153

Sáez, I., Solabarrieta, J., & Rubio, I. (2021). Motivation for physical activity in university students and its relation with gender, amount of activities, and sport satisfaction. *Sustainability, 13*(6), 3183. https://doi.org/10.3390/su13063183

Harmiardillah, S., Kusnanto, I., Krisnana, I., & Priastana, I. K. A. (2020). The effect of mindfulness-based eating exercise with Social Cognitive Theory (SCT) approach to self-efficacy and dietary adherence of diabetes mellitus type 2. *Journal of International Pharmaceutical Research, 13*(1), 413–419. https://doi.org/10.31838/ijpr/2021.13.01.078

Lu, Y., Yu, K., & Gan, X. (2022). Effects of a SMART goal setting and 12-week core strength training intervention on physical fitness and exercise attitudes in adolescents: A randomized controlled trial. *International Journal of Environmental Research and Public Health, 19*(13), 7715. https://doi.org/10.3390/ijerph19137715

Röglin, L., Stoll, O., Ketelhut, K., Martin-Niedecken, A. L., & Ketelhut, S. (2023). Evaluating changes in perceived enjoyment throughout a 12-week school-based exergaming intervention. *Children, 10*(1), 144. https://doi.org/10.3390/children10010144

Pasi, H., Lintunen, T., Leskinen, E., & Hagger, M. S. (2021). Predicting school students' physical activity intentions in leisure-time and school recess contexts: Testing an integrated model based on self-determination theory and theory of planned behavior. *PLOS ONE, 16*(3), e0249019. https://doi.org/10.1371/journal.pone.0249019

Peng, F., & Zhang, L. W. (2021). The relationship of competitive cognitive anxiety and motor performance:

Testing the moderating effects of goal orientations and self-efficacy among Chinese collegiate basketball players. *Frontiers in Psychology,* 12, 685649. https://doi.org/10.3389/fpsyg.2021.685649

Dishman, R. K., McIver, K. L., Dowda, M., Saunders, R. P., & Pate, R. R. (2019). Self-efficacy, beliefs, and goals: Moderation of declining physical activity during adolescence. *Health Psychology, 38*(6), 483-493. https://doi.org/10.1037/hea0000734

Lee, S., Kwon, S., & Ahn, J. (2021). The effect of modeling on self-efficacy and flow state of adolescent athletes through role models. *Frontiers in Psychology,* 12, 661557. https://doi.org/10.3389/fpsyg.2021.661557

Van Sluijs, E. M. F., Ekelund, U., Crochemore-Silva, I., Guthold, R., Ha, A., Lubans, D., Oyeyemi, A. L., Ding, D., & Katzmarzyk, P. T. (2021). Physical activity behaviours in adolescence: Current evidence and opportunities for intervention. *Lancet, 398*(10298), 429-442. https://doi.org/10.1016/S0140-6736(21)01259-9

Hoffmann, M. D., Barnes, J. D., Tremblay, M. S., & Guerrero, M. D. (2022). Associations between organized sport participation and mental health difficulties: Data from over 11,000 US children and adolescents. *PLOS ONE, 17*(6), e0268583. https://doi.org/10.1371/journal.pone.0268583

Graupensperger, S., Sutcliffe, J., & Vella, S. A. (2021). Prospective associations between sport participation and indices of mental health across adolescence. *Journal of Youth and Adolescence, 50*(7), 1450-1463. https://doi.org/10.1007/s10964-021-01416-0

Rullestad, A., Meland, E., & Mildestvedt, T. (2021). Factors Predicting Physical Activity and Sports Participation in Adolescence. J*ournal of Environmental and Public Health,* 2021, 1-10. https://doi.org/10.1155/2021/9105953

Huđin, N., Glavaš, D., & Pandžić, M. (2020). Contact sports as a sport of more aggressive athletes? Aggressiveness and other psychological characteristics of youth athletes involved in contact and non-contact sports. *Tims. Acta: naučni časopis za sport, turizam i velnes, 14*(1), 5-16. https://doi.org/10.5937/timsact14-27343

Baek, J., Won, D., Lee, C., & Pack, S. M. (2020). Adolescent participation in new sports: Extended theory of planned behavior. *Journal of Physical Education and Sport, 20*(Supplement issue 3), Art 301, 2246-2252. https://doi.org/10.7752/jpes.2020.s3301

Carreres-Ponsoda, F., Escartí, A., Jimenez-Olmedo, J. M., & Cortell-Tormo, J. M. (2021). Effects of a teaching personal and social responsibility model intervention in competitive youth sport. *Frontiers in Psychology,* 12, 624018. https://doi.org/10.3389/fpsyg.2021.624018

Rhodes, R. E., Cox, A., & Sayar, R. (2022). What predicts the physical activity intention-behavior gap? A systematic review. *Annals of Behavioral Medicine, 56*(1), 1-20. https://doi.org/10.1093/abm/kaab044

Розгляд впливу 12-тижневої інтервенційної програми на поведінкові наміри та пов'язані зі здоров'ям ключові конструкти у баскетболістів підліткового віку

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Авторський вклад: A – дизайн дослідження; B – збір даних; C – статаналіз; D – підготовка рукопису; E – збір коштів

Реферат. Стаття: 8 с., 5 табл., 32 джерела.

Мета дослідження. Метою цього дослідження було оцінити вплив 12-тижневої інтервенційної програми з баскетболу на поведінкові наміри підлітків та пов'язані зі здоров'ям ключові конструкти, включаючи самоефективність, соціальну підтримку, ситуативні фактори та очікувані результати, ґрунтуючись на соціально-когнітивній теорії (СКТ) та акцентуючи увагу на представниках кожної статі із проведенням порівняльного аналізу для обох статей.

Матеріали та методи. У дослідженні взяли участь 175 підлітків (вік: 12-14 років) з баскетбольних клубів провінції Гуансі, Китай. Учасників було розподілено за статевою приналежністю на дві групи (чоловіча [n = 88] та жіноча [n = 87] групи), які проходили інтервенційну програму впродовж 12 тижнів. Проведено перевірку валідності та надійності усіх вимірювань. З метою визначення предикторів поведінкових намірів, які використовувались для розроблення інтервенційної програми, було застосовано регресійний аналіз.

Результати. Інтервенція сприяла значному поліпшенню показників самоефективності, соціальної підтримки, ситуативних факторів, очікуваних результатів та поведінкових намірів як у підлітків чоловічої, так і жіночої статі. Показник поведінкових намірів у хлопців збільшився з 3,19 до 3,77 балів, а у дівчат — з 3,3 до 4,27 балів ($p < 0,001$). Крім того, відзначено зростання показників самоефективності з 3,51 до 4,22 у хлопців та з 3,26 до 4,23 у дівчат ($p < 0,001$). У представників обох статей також спостерігалося покращення інших конструктів, причому значущих гендерних відмінностей у результатах після проведення інтервенції не встановлено ($p > 0,05$).

Висновки. Отримані дані вказують на ефективність впровадження 12-тижневої інтервенційної програми на основі СКТ, яка сприяла поліпшенню поведінкових намірів підлітків та пов'язаних з ними конструктів. Розроблення гендерно-специфічних інтервенційних програм є важливою складовою для максимізації ефективності проведення інтервенції.

Ключові слова: поведінкові наміри, тренування з баскетболу, самоефективність, соціальна підтримка, ситуація, очікувані результати.

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