



## Managing Emotions and Motivation: Psychological Strategies in Volleyball Learning

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### Abstract

The purpose of this study was to examine the intervention of mindfulness training in emotion management and motivation in improving students' engagement and achievement in learning volleyball at Vocational High School. This research is experimental research. The quasi-experimental method used is one group pretest-posttest design. Mindfulness intervention is implemented directly with participants by carrying out mindfulness meditation as an effort to manage students' emotions and motivation. for motivation using a sports achievement motivation instrument adapted by Miftah Janah based on Smith's theory. The results of this study show that mindfulness training intervention has a significant effect in improving emotional intelligence and student motivation in learning volleyball at SMK Muhammadiyah Abung Semuli. The conclusion of the research is that mindfulness training can increase students' emotional intelligence and motivation in learning volleyball. Thus, providing treatment in the form of mindfulness exercises has a positive impact on students, namely increasing the level of emotional intelligence and student motivation in learning volleyball.



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## INTRODUCTION

Emotion management and motivation in the context of volleyball learning highlight the importance of psychological aspects in improving student performance and well-being in a high school setting. Volleyball as a team sport not only demands physical skills, but also relies on cooperation, confidence, and the ability to manage pressure in competitive situations. Students at this level often experience various psychological challenges such as anxiety, competitive stress, and lack of motivation that can affect their performance on the court. Volleyball learning in schools is not only about the techniques and strategies of the game, but also about developing emotional intelligence that helps students manage negative emotions such as frustration and uncertainty when facing failure or pressure in matches (Arikan Fidan 2020). In addition, the psychological aspect also includes students' intrinsic and extrinsic motivation, which directly affects their level of commitment to training and matches.

Psychological strategies such as relaxation techniques, positive visualization, and clear goal building can help students overcome their psychological challenges and improve their performance in volleyball learning (Lin et al. 2021). This study aims to identify the best approaches in the management of students' emotions and motivation through volleyball learning, focusing on methods that can be effectively applied by coaches and teachers in high schools. Thus, a better understanding of the interaction between psychological factors and sports learning could support the comprehensive development of students at this level of education (Piñeiro-Cossio et al. 2021). In the context of volleyball learning in high

school, managing students' emotions and motivation is a significant challenge for coaches and educators. In the field, there are often problems related to variations in motivation levels between students. Some students may have high internal motivation and great enthusiasm towards training and matches, while others may feel unmotivated or experience significant fluctuations in motivation.

This can affect their overall performance and overall team cohesion. In addition, emotional aspects such as pre-match anxiety, frustration when facing technical difficulties, or disappointment after a loss can also affect students' ability to learn and thrive in the sport (Myakotnykh et al. 2022). Effective psychological strategies are needed to help students manage their emotions well, maintain stable motivation, and build mental toughness so that they can better deal with the pressures and challenges that exist on the field.

Existing research has shown increasing attention to the integration of psychological aspects in physical education, particularly in the context of sports such as volleyball at the senior high school level. Previous studies have tended to focus on the development of technical and physical skills without deeply integrating emotion management and motivation, which are important aspects for improving sports performance and students' psychological well-being. These studies often include techniques such as visualization, positive self-talk and goal setting, which can provide significant benefits in improving student-athletes' focus, motivation and confidence.

However, there is a lack in the literature regarding the specific application of these psychological strategies in the context of high school volleyball. The few existing studies provide initial insights, but there has been

no comprehensive and systematic research that thoroughly investigates how these techniques can be effectively applied in the daily practice and competition of youth volleyball. In addition, little research has examined the long-term impact of applying these techniques on students' intrinsic motivation, which is an important factor for sustainable skill building and participation in sport.

Specifically, there is a need to further explore how these psychological factors can influence students' intrinsic motivation in the long term, as well as how this can be concretely integrated into the physical education curriculum in high school. By filling this gap, research can provide practical guidance for coaches and educators in optimizing the learning experience and sporting achievements of students at the high school level. A holistic approach to volleyball learning will not only improve students' athletic performance, but also form the foundation of their sport.

This research offers an innovative approach in understanding and managing students' emotions and motivation in the context of learning volleyball in senior high schools. Different from previous studies that tend to focus on the physical and technical aspects of sport, this research explores how emotion management techniques and motivational strategies can be effectively integrated into the physical education curriculum. Through an interdisciplinary approach that combines educational psychology theory with sport practice, this study develops and tests psychology-based interventions such as mindfulness training, specific and realistic goal setting, and intrinsic motivation techniques to improve student engagement and achievement. The results of this study are expected to not only contribute towards improving students'

sporting performance, but also strengthen their overall emotional well-being and motivation to learn. Thus, this study provides new insights into the importance of psychological approaches in sports learning, particularly volleyball, which can be a reference for educators in developing a more holistic and effective physical education programme in the secondary school setting. The purpose of this study was to examine the effectiveness of emotion management techniques and motivational strategies in improving students' engagement as well as their achievement in learning volleyball in Senior High School.

## METHODS

The implementation of this research was conducted to 42 students at SMK Muhammadiyah Abung Semuli. This research is experimental research. The quasi-experimental method was conducted to test the effect of mindfulness intervention on emotion and motivation in learning volleyball in high school. The quasi-experimental design used in this study was one group pretest-posttest design. The mindfulness intervention was implemented directly to the participants by conducting mindfulness meditation as an effort to manage students' emotions and motivation. The face-to-face session lasted about 60 minutes for 3 meetings. The first thing the participants in this study did was to fill out the willingness to be a participant form and also fill out the Emotion and Motivation questionnaire. Indicators for the emotional intelligence questionnaire were taken from the theory (Goleman 2000) with indicators of self awareness, self regulation, self motivation, social awareness, and social skills. While for motivation using the sports achievement motivation instrument adapted by Miftah janah based

on the theory (Smith et al. 2020). The instrument is a pre-test measuring tool for the level of psychological aspects of each participant before being given an intervention.

At the end of the session, participants who had been given the mindfulness intervention were given the Emotion and Motivation questionnaire again as a post-test. The data collection technique in this study used a Likert scale with four answer options, namely (SS) strongly agree, (S) agree, (TS) disagree, (STS) strongly disagree. Instrument validity and reliability tests have been carried out to measure the validity of the instrument and so that the research results can be trusted (Jannah 2018). The validity test has been used on the sports achievement motivation scale. The reliability test uses the Cronbach alpha technique with a reliability coefficient of 0.72.

## RESULT

Data acquired from the research with appropriate statistical analysis described in the methods section should be included in this section. In this part, the same data/ information given in a table must not be repeated in a figure, or vice versa. Tables and Figures should be self explanatory and it is not acceptable to repeat extensively the numerals from tables into text and give lengthy and unnecessary explanations of the Tables and Figures.

### Tables & Figures

Tables and figures should be embedded in the text. Tables should be created in open form with a word processor and cited consecutively in the text. To ensure the highest print quality, your figures must be submitted in TIF format with minimum 300 dpi or higher resolutions. Captions/legends will be placed below figures and adjusted to 8-10 font size.

**Table 1.** Descriptive statistics

	Mean	Median	Std. Deviation	Minimum	Maximum
Pre-Test	145.6429	143.0000	7.62160	128.00	159.00
Post Test	181.4286	182.0000	7.89301	168.00	195.00

Based on the table above, it can be seen that the average value is 33.50

with a standard deviation of 3.10, standard error of 0.409.

**Table 2.** t test

Table 2: t test											
		Paired Differences						t	df	Significance	
		Mean	Std. Devia tion	Std. Error Mean	95% Confidence Interval of the Difference					One- Sided p	Two- Sided p
					Lower	Upper					
Pair 1	PosTest - PreTest	35.78	9.24	1.42670	32.904	38.666		25.08	41	<.001	<.001

The average difference (Mean) between the PostTest and PreTest results is 35.78571, which shows a significant increase in test results after treatment. The standard deviation (Std. Deviation) of this difference is 9.24606, reflecting the variation in the difference between test scores before and after treatment. The standard error mean (Std. Error Mean) of 1.42670 shows how far the average difference is expected to spread from the true population if the study is repeated several times. The 95% confidence interval (95% Confidence Interval of the Difference) shows the range of values where we can be 95% sure that the actual mean difference is between 32.90444 and 38.66699. In other words, we are fairly confident that a marked improvement occurred in test results after treatment.

The t value (t) of 25.083 indicates that the difference between PreTest and PostTest is very significant. The degree of freedom (df) value is 41, which is the number of observations minus one. To test significance, the one-sided (One-Sided p) and two-sided (Two-Sided p) p values were both less than 0.001. This means that the results we observe are very unlikely to have occurred by chance. This very small p value indicates that there is a very significant difference between the PreTest and PostTest results, strengthening the hypothesis that the treatment or intervention has a real and positive effect on the test results. Overall, this analysis shows that there is a significant improvement in the test results after intervention, which is supported by statistical values that show real and very significant differences

## DISCUSSION

The results of this study revealed that the use of mindfulness practice techniques provided significant benefits

in the management of students' emotions during volleyball practice and matches in Senior High School. Mindfulness practice, which focuses on self-awareness and breathing control, has been shown to be effective in helping students manage negative emotions such as anxiety and frustration that often arise in the competitive context of sport (Liang et al. 2024). In the context of volleyball training, students often face pressure to perform well and achieve expected results, which can lead to high levels of stress (Saman et al. 2022). This research shows that mindfulness practices help students to stay focused on the present moment, reducing distraction and excessive worry regarding their performance. By increasing awareness of their thoughts and emotions, students can more easily recognise early signs of stress and take steps to address or reduce its impact before it interferes with their performance

In addition, mindfulness practice also contributes to improved overall emotional stability (Fazia et al. 2020). By engaging in this practice regularly, students train the skills to control their emotional reactions and maintain composure in demanding situations. This is not only beneficial in the context of sport, but can also be applied in students' daily lives, helping them to face challenges more calmly and effectively. This research confirms that the integration of mindfulness exercises into the physical education curriculum can provide long-term benefits in the establishment of students' emotional well-being and the improvement of their performance in sport (Martín-Rodríguez et al. 2024). By providing tools to manage stress and improve emotional stability, educators can help students develop competencies that are critical in building a strong foundation for their

success not only in volleyball, but also in other aspects of their lives.

The implementation of intrinsic motivation strategies and the establishment of specific and realistic goals have a significant effect on students' motivation to actively participate in volleyball lessons in high school (Fishbach and Woolley 2022). This approach aims to encourage students to focus more on the value of learning and personal achievement, rather than just on the end result or external recognition. In the context of volleyball learning, the emphasis on intrinsic aspects such as a sense of personal achievement based on individual progress and effort exerted, encourages students to internalize their own motivation (Chaudhuri 2020). The formation of specific and realistic goals plays an important role in directing students' efforts towards concrete and measurable achievements in the learning of this sport. Through this process, students become more structured in their approach to practice and competition, which in turn increases their overall engagement. This was shown to encourage a deeper commitment to the volleyball learning process, as students felt they had greater control over their goals and achievements.

The emphasis on intrinsic motivation also has a positive impact on students' motivation in the long term (Shin and Bolkan 2021), as they learn to value the learning process itself and enjoy the challenges that come along with it. Psychologically, the positive experiences associated with achieving self-set goals can strengthen students' perceptions of their own abilities and generate a longer-lasting sense of satisfaction. Thus, this strategy not only increases students' motivation to actively participate in volleyball learning, but also develops critical thinking, problem

resolution, and time management skills that are important in their personal development. Effective integration of intrinsic motivation strategies and goal formation in the physical education curriculum in high school can provide significant long-term benefits for students' holistic development.

This study provides strong evidence that the implementation of psychology-based interventions significantly positively impacted students' engagement in volleyball learning in high school. Through the use of techniques such as mindfulness exercises, specific goal setting, and strengthening intrinsic motivation, students not only improved their technical skills in the sport, but also showed improvements in their courage to take risks and actively participate in competitions. First of all, the use of mindfulness exercises has been shown to be effective in helping students manage their emotions during practice and matches (Cañabate et al. 2020). By increasing self-awareness and the ability to deal with pressure more effectively, students become more emotionally stable and more focused on the tasks they face on the field. This not only reduces stress and anxiety levels, but also allows them to demonstrate more consistent performance in competitive situations.

Interventions based on the formation of specific and realistic goals assist students in directing their energy and focus in achieving desired achievements in volleyball (Knight 2020). By setting clear goals, students become more motivated and committed to achieving progress in their technical skills as well as improving overall team performance. This not only affects individual achievement but also enhances team cohesion and competitive spirit within the sports learning environment. In addition, the

reinforcement of intrinsic motivation, i.e. motivation that comes from within students themselves such as a sense of personal achievement and satisfaction in learning, also plays an important role in increasing student engagement. By developing a sense of responsibility for their own learning, students become more active in seeking out new challenges and taking part in activities that demand higher mental and physical abilities (Ribeiro-Silva et al. 2022). This research makes a significant contribution to the understanding of the importance of psychological approaches in the learning of sport in senior high schools. The findings may provide a foundation for further development in physical education that is more holistic and supports students' development in various aspects of their lives.

The implementation of a programme that integrates emotion management techniques and motivational strategies in volleyball learning in high schools significantly impacts students' emotional well-being (Méndez-Giménez et al. 2022). Through mindfulness practice and specific goal setting, students are able to develop skills to manage stress and anxiety that may arise during training and matches. These techniques not only help students respond to pressure more effectively, but also strengthen their mental resilience in the face of psychological challenges off the field. In addition, the intrinsic motivation strategies emphasized in this study also play an important role in improving students' overall learning motivation. By emphasizing the intrinsic value of sporting activities, such as skill development and personal achievement, students were more motivated to actively participate in practice and improve their performance in volleyball. The positive impact of this intrinsic motivation is seen in higher levels of commitment to

learning and improved student academic performance outside of the sporting context.

In addition to improving emotional well-being and learning motivation, the study also showed that students involved in the programme experienced improvements in their cognitive ability to cope with complex challenges and solve problems (Fitriani et al. 2020). This reflects the effectiveness of psychology-based interventions in developing students' competencies not only in sport, but also in broader aspects of life (Ronkainen et al. 2021). These findings provide a strong basis for the development of a more holistic and personal development-orientated approach to physical education. The integration of psychological techniques into the physical education curriculum may provide long-term benefits in preparing students to face complex life challenges and promoting emotional well-being and sustained motivation to learn.

The findings of this study offer a significant contribution to the development of physical education programmes in high schools by integrating psychological techniques into the curriculum. First of all, the results showed that the use of emotion management techniques such as mindfulness exercises can effectively help students cope with pressure and improve their emotional well-being while participating in volleyball activities. These exercises help students to be more calm and focused, so that they can better manage negative emotions such as anxiety and frustration during practice and competition. In addition, intrinsic motivation strategies such as goal setting that is specific and relevant to students' needs have been shown to be effective in increasing their engagement in volleyball learning. By emphasizing

intrinsic values such as a sense of personal achievement and skill development, students become more motivated to actively participate and strive to achieve the goals they set for themselves. This not only improves their sporting performance but also strengthens their overall learning motivation.

Another finding of this study is that the integration of these psychological techniques not only improves students' sporting performance, but also prepares them to face the challenges of everyday life off the court. The ability to manage emotions and motivation gained from learning volleyball can help students in various aspects of life, including academic, social, and professional. Thus, this approach not only enhances the effectiveness of learning in sport but also supports the development of emotional and cognitive competencies that are essential for students' long-term success.

Overall, this study provides valuable guidance for educators and coaches in designing physical education curricula that are more holistic and orientated towards developing all aspects of students' well-being. The integration of psychological techniques such as emotion management and intrinsic motivation not only strengthens students' sporting performance but also supports their development as resilient and empowered individuals. Thus, the implementation of the results of this study can result in positive changes in physical education at the high school level, creating a learning environment that supports students' comprehensive growth in all aspects of their lives.

## CONCLUSION

The conclusion of the research is that mindfulness training can increase

students' emotional intelligence and motivation in learning volleyball. Thus, providing treatment in the form of mindfulness exercises has a positive impact on students, namely increasing the level of emotional intelligence and student motivation in learning volleyball.

## REFERENCES

- Arikan Fidan, N. E. S. L. İ. H. A. N. (2020). Effect Of Sport Education Model-Based Social-Emotional Learning Program On Emotional Intelligence. *International Education Studies*, 13(4).
- Cañabate, Dolors, Mónica Santos, David Rodríguez, Teresa Serra, and Jordi Colomer. 2020. "Emotional Self-Regulation through Introjective Practices in Physical Education." *Education Sciences* 10(8):208.
- Chaudhuri, Joydeep Dutta. 2020. "Stimulating Intrinsic Motivation in Millennial Students: A New Generation, a New Approach." *Anatomical Sciences Education* 13(2):250–71.
- Defliyanto, D., Yarmani, Y., Sihombing, S., & Sari, N. K. (2021). Analysis Of Volleyball Extracurricularcity At State Junior High Schools In Bengkulu. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 5(2), 437-445.
- Fazia, Teresa, Francesco Bubbico, Ioannis Iliakis, Gerardo Salvato, Giovanni Berzuini, Salvatore Bruno, and Luisa Bernardinelli. 2020. "Short-Term Meditation Training Fosters Mindfulness and Emotion Regulation: A Pilot Study." *Frontiers in Psychology* 11:558803.
- Fishbach, Ayelet, and Kaitlin Woolley. 2022. "The Structure of Intrinsic Motivation." *Annual Review of Organizational Psychology and Organizational Behavior* 9:339–63.

- Fitriani, Apriza, Siti Zubaidah, Herawati Susilo, and Mimien Henie Irawati Al Muhdhar. 2020. "The Effects of Integrated Problem-Based Learning, Predict, Observe, Explain on Problem-Solving Skills and Self-Efficacy." *Eurasian Journal of Educational Research* 20(85):45–64.
- Goleman, Daniel. 2000. "Emotional Intelligence, Jakarta: PT." Gramedia Pustaka Umum.
- Herianto, H., Yarmani, Y., Sutisyana, A. & Defliyanto, D (2018). Analisis kemampuan open spike pada siswa putra ekstrakurikuler bola voli di SMPN 18 Kota Bengkulu. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 2(2), 160-165.
- Jannah, Miftakhul. 2018. "Metodologi Penelitian Kuantitatif Untuk Psikologi." *Journal of Chemical Information and Modeling* 53(9).
- Knight, Allan. 2020. "Using Self-Assessment to Build Self-Efficacy and Intrinsic Motivation in Athletes: A Mixed Methods Explanatory Design on Female Adolescent Volleyball Players." *The Qualitative Report* 25(2):320–46.
- Liang, Peili, Hongyu Jiang, Huilin Wang, and Jiaxin Tang. 2024. "Mindfulness and Impulsive Behavior: Exploring the Mediating Roles of Self-Reflection and Coping Effectiveness among High-Level Athletes in Central China." *Frontiers in Psychology* 15:1304901.
- Lin, Hsiao-Hsien, Tzu-Yun Lin, Ying Ling, and Chih-Cheng Lo. 2021. "Influence of Imagery Training on Adjusting the Pressure of Fin Swimmers, Improving Sports Performance and Stabilizing Psychological Quality." *International Journal of Environmental Research and Public Health* 18(22):11767.
- Martín-Rodríguez, Alexandra, Laura Augusta Gostian-Ropotin, Ana Isabel Beltrán-Velasco, Noelia Belando-Pedreño, Juan Antonio Simón, Clara López-Mora, Eduardo Navarro-Jiménez, José Francisco Tornero-Aguilera, and Vicente Javier Clemente-Suárez. 2024. "Sporting Mind: The Interplay of Physical Activity and Psychological Health." *Sports* 12(1):37.
- Méndez-Giménez, Antonio, María del Pilar Mahedero-Navarrete, Federico Puente-Maxera, and Diego Martínez de Ojeda. 2022. "Effects of the Sport Education Model on Adolescents' Motivational, Emotional, and Well-Being Dimensions during a School Year." *European Physical Education Review* 28(2):380–96.
- Myakotnykh, Vladimir Vasilyevich, Konstantin Georgievich Tomilin, Julia Alekseevna Vasilkovskaya, Elena Borisovna Sarkisyan, and Viktoriya Georgievna Maksimenko. 2022. "Effect of Sports Games on the Adaptation of Students to the Conditions of Education at Higher Education Institutions." *Journal of Physical Education and Sport* 22(1):180–86.
- Piñeiro-Cossio, Javier, Antonio Fernández-Martínez, Alberto Nuviala, and Raquel Pérez-Ordás. 2021. "Psychological Wellbeing in Physical Education and School Sports: A Systematic Review." *International Journal of Environmental Research and Public Health* 18(3):864.
- Ribeiro-Silva, Elsa, Catarina Amorim, José Luis Aparicio-Herguedas, and Paula Batista. 2022. "Trends of Active Learning in Higher Education and Students' Well-Being: A Literature Review." *Frontiers in Psychology* 13:844236.
- Ronkainen, Noora J., Kenneth Aggerholm, Tatiana V Ryba, and Jacquelyn Allen-Collinson. 2021. "Learning in Sport: From Life Skills to Existential

- Learning.” *Sport, Education and Society* 26(2):214–27.
- Saman, Samera, Mohibullah Khan Marwat, Wasim Khan, Muhammad Shah, Rahila Nizami, Fouzia Tabassum, Yasir Iqbal, and Kashif Mehmood. 2022. “Stress And Its Coping Strategies Among Male Volleyball Players.” *Journal of Positive School Psychology* 6(9):4970–79.
- Shin, Matt, and San Bolkan. 2021. “Intellectually Stimulating Students’ Intrinsic Motivation: The Mediating Influence of Student Engagement, Self-Efficacy, and Student Academic Support.” *Communication Education* 70(2):146–64.
- Smith, Robert L., Mehmet A. Karaman, Richard S. Balkin, and Saumya Talwar. 2020. “Psychometric Properties and Factor Analyses of the Achievement Motivation Measure.” *British Journal of Guidance & Counseling* 48(3):418–29.