



The Influence of Psychosocial Factors on Motivation and Compliance in Table Tennis Training

Deni Rahman Marpaung^{a,b,c,d}, **Clarisa Anggriani Malau^{a,b,c,d,e*}**, **Putri Anjeli Napitupulu^{a,b,c,d,e}**, **Alan Gibron Ersada Ginting^{a,b,c,d,e}**, **Inke Monica br Ginting^{a,b,c,d,e}** ¹Physical Education Health and Recreation, Faculty of Sports Science, Universitas Negeri Medan, Sumatera Utara, 20221, Indonesia

e-mail: denirahman@unimed.ac.id, clarisaanggrianimalau@gmail.com,
putrinapitupulu08@gmail.com, alanginting1301@gmail.com, inkemonicaabrginting@gmail.com

Abstract

The aim of this research is to investigate the influence of psychosocial factors on motivation and compliance in table tennis training in Indonesia. The research method employed is a cross-sectional observational study involving 30 table tennis student participants from Medan State University. Data were collected through an online survey covering questions on motivation, social support, self-perception, motivation, and compliance in table tennis training. Data analysis involved descriptive analysis and regression to evaluate the relationships between these variables. The research results indicate that motivation, social support, and self-perception are significantly associated with athlete motivation and compliance. The implications of these findings underscore the need to consider psychosocial aspects in the development of training programs and athlete coaching in table tennis in Indonesia. However, this study has limitations and requires further research to validate these findings. Thus, this research provides valuable insights into understanding the factors influencing the performance of table tennis athletes in Indonesia and can serve as a basis for the development of more effective training strategies in the future.

Keywords: Psychosocial; Motivation; Compliance; Table Tennis

Corresponding Author

email: clarisaanggrianimalau@gmail.com

Artikel Info:

Submitted: 22/01/2024

Revised: 20/03/2024

Accepted: 09/05/2024

Published: 13/05/2024

How to Cite: Marpaung, D. R., Malau, C. A., Napitupulu, P. A., Ginting, A. G. E., Ginting, I. M. (2024). The Influence of Psychosocial Factors on Motivation and Compliance in Table Tennis Training. *Journal Coaching Education Sports*, 5(1), 45-52. [https://doi.org/10.31599/jces.5\(1\).1535](https://doi.org/10.31599/jces.5(1).1535)

Author's Contribution: a – Study Design; b – Data Collection; c – Statistical Analysis; d – Manuscript Preparation; e – Funds Collection



Journal Coaching Education Sports is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

A. Introduction

Throughout the world, sports have been recognized as a key element in promoting a healthy and active lifestyle (Hita et al., 2020), Table tennis is one of the sports that is favored by many people (Hariyanto & Firmansyah, 2020). However, despite the widely known physical benefits of table tennis training, the role of psychosocial factors such as motivation and social support is still not fully understood (Wulandari, 2014). In Indonesia, interest in table tennis is growing. However, challenges in maintaining the motivation and discipline of players are of primary concern.

Psychosocial factors play a crucial role in influencing athletes' performance (Hafidz et al., 2022). Social support, self-perception, and intrinsic motivation have been identified as significant factors influencing athletes' achievement (et al., 2023). However, there is limited research focusing on the relationship between psychosocial factors and the performance of table tennis athletes.

There have been previous studies that have investigated the influence of psychosocial factors on motivation and compliance in the context of sports. For example, a study by (Pratisto, 2023) the self-determination theory (SDT) has shown that intrinsic motivation, which stems from

internal desires, plays a crucial role in enhancing athletes' performance. Meanwhile, the book authored by (Dimiyati, 2018) highlights the concept of passion and finds that strong passion for sports can enhance athletes' motivation to train consistently.

In the context of table tennis, research by (Aminullah et al., 2020) examined the relationship between social support and motivation among competitive table tennis athletes. The research findings indicate that social support provided by coaches and teammates can positively impact athletes' intrinsic motivation, which in turn enhances their performance in training and competitions.

In Indonesia, research on psychosocial factors in the context of sports, especially table tennis, is still limited. A study by (Alim, 2018) is one of the exceptions, examining self-perception and motivation among junior table tennis athletes in Indonesia. The research findings indicate that positive self-perception and high intrinsic motivation correlate with better achievements in table tennis competitions.

Although there have been several relevant studies, there are still knowledge gaps that need to be filled, especially in understanding more deeply how these psychosocial factors specifically influence the motivation and compliance of table

tennis athletes in Indonesia. Research on psychosocial factors in sports, including table tennis, has yielded valuable insights into how motivation, social support, and self-perception affect athlete performance. However, most of these studies have been conducted outside the Indonesian context, and research on table tennis in Indonesia itself is still limited. Therefore, to address this knowledge gap, this study will combine these findings with the specific Indonesian context, aiming to provide a deeper understanding of the psychosocial factors influencing motivation and compliance of table tennis athletes in Indonesia.

The aim of this research is to analyze in-depth the influence of psychosocial factors, including motivation, social support, and self-perception, on motivation and compliance in table tennis training in Indonesia. Thus, this research is expected to provide a more comprehensive insight into the factors affecting the performance of table tennis athletes in Indonesia and contribute to the development of training and coaching strategies in the future.

B. Methods

This study will utilize a quantitative approach to gather and analyze data. The research design will be a cross-sectional observational study. The population for this study consists of table tennis players who are students at Universitas Negeri Medan, both at the amateur and professional levels. The sample will be purposively selected from several table tennis clubs or training centers, totaling 30 students.

The main variables in this study are psychosocial factors (such as motivation, social support, self-perception) as well as motivation and compliance in table tennis training. These variables will be measured using standardized questionnaires that have been tested for reliability and validity. The data collection instrument to be used is a questionnaire that has been tailored to the research context. This questionnaire will include questions designed to measure the levels of motivation, social support, self-perception, motivation, and compliance in table tennis training.

Table 1. Instrument Grid

Variable	Dimention	Indicator
Motivation	Intrinsic	<ul style="list-style-type: none">• - More enthusiasm• - Satisfaction in making progress• - Pleasure in overcoming challenges
	Extrinsic	<ul style="list-style-type: none">• - Encouragement from external rewards• - Pressure from other people's expectations• - Motivation to obtain a reward or
	Support from coach	<ul style="list-style-type: none">• - Provide technical guidance• - Provide moral encouragement

Variable	Dimension	Indicator
Social Support	Support and teammates	<ul style="list-style-type: none"> • - Listening and understanding the problem • - Providing support when athletes fail • - Providing encouragement and morale • - Assist in solving problems
	Confidence in own abilities	<ul style="list-style-type: none"> • - Confidence in table tennis playing skills • - Confidence in overcoming challenges • - Confidence in achieving goals
Self-perception	Satisfaction with self	<ul style="list-style-type: none"> • - Feeling satisfied with the progress made • - Feeling confident with performance on the field • - Appreciate the effort and dedication in coaching
	Enthusiasm in practicing	<ul style="list-style-type: none"> • - Feeling happy and excited when practicing • - Experiencing excitement when discovering new things in training • - Enjoy the learning process and skill development
Compliance in table tennis	Willingness to face challenges	<ul style="list-style-type: none"> • - Determined to overcome obstacles and difficulties in training • - Remain focused and persistent in achieving training goals • - Ready to face challenges that arise during training

Data will be collected through online surveys or direct interviews, depending on respondent preferences. Online surveys will be managed through a reliable survey platform, while direct interviews will be conducted by trained researchers or research teams. The collected data will be analyzed using appropriate statistical techniques, such as regression analysis to evaluate the relationships between the variables under investigation. Statistical analysis conducted will include testing the

validity and reliability of the instruments, descriptive analysis, and inferential analysis.

This research will ensure compliance with research ethics, including ethical approval, data confidentiality, and protection of participants' rights. All participants will be required to provide written informed consent before they are involved in this research.

C. Result and Discussion

Result

Table 2. Description of Research Variables

Variable	Mean	Standart Deviation
Motivation	4.5	0,72
Social Support	4.2	0.68
Self-perception	4.6	0.65
Compliance in table tennis	4.3	0.75

From Table 2, it can be observed that the average motivation, social support, self-perception, and compliance in table tennis training are at relatively high levels, with relatively low standard deviations. This indicates consistency in the levels of

these variables among the respondents. Next, the regression coefficient for the Relationship between Psychosocial Factors and Motivation and Compliance is calculated in Table 3 below:

Table 3. Relationship between Psychosocial Factors and Motivation and Compliance

Variable	Regulation Coefficient	p-value
Motivation	0.35	<0.001
Social Support	0.28	0.003
Self-perception	0.42	<0.001

From Table 3, the regression analysis results indicate that motivation, social support, and self-perception are significantly positively associated with motivation and compliance in table tennis training. The positive regression coefficients suggest that an increase in these psychosocial factors will result in a proportional increase in athlete motivation and compliance. Thus, the findings of this research support the hypothesis that psychosocial factors have a significant influence on motivation and compliance in table tennis training in Indonesia. This has important implications for the development of training strategies and athlete coaching, emphasizing the

importance of addressing psychosocial aspects in efforts to enhance the performance of table tennis athletes.

Discussion

From the results of this research, it can be concluded that psychosocial factors, including motivation, social support, and self-perception, have a significant influence on motivation and compliance in table tennis training in Indonesia. Regression analysis results indicate that an increase in motivation, social support, and self-perception will positively contribute to athlete motivation and compliance.

These findings are consistent with previous research in other sports contexts.

For example, a study by (Pratisto, 2023) the self-determination theory (SDT) has shown that intrinsic motivation, which stems from internal desires, plays a crucial role in enhancing athletes' performance. These findings are also consistent with the research by (Dimiyati, 2018) highlighting the concept of passion and finding that strong passion for sports can increase athletes' motivation to train consistently.

Specifically, in the context of table tennis, the research findings by (Aminullah et al., 2020) examining the relationship between social support and motivation among competitive table tennis athletes also support our findings. The research indicates that social support provided by coaches and teammates can positively impact athletes' intrinsic motivation, which in turn enhances their performance in both training and competitions.

However, there are limitations in this study. One of them is the use of cross-sectional study method, which does not allow for definitive conclusions about causality. Therefore, longitudinal research involving long-term monitoring of athletes can provide a deeper understanding of the relationship between psychosocial factors and motivation as well as compliance in table tennis training.

Thus, the results of this research provide a significant contribution to understanding the importance of

psychosocial factors in enhancing motivation and compliance of table tennis athletes in Indonesia. The implications of these findings emphasize the need for the development of training and coaching programs that take into account these psychosocial aspects, as well as the emphasis on fostering strong social support for athletes.

D. Conclusion

From this study, it can be concluded that psychosocial factors play a significant role in influencing motivation and compliance in table tennis training in Indonesia. These findings are consistent with previous research in other sports contexts, indicating that intrinsic motivation, social support, and self-perception play crucial roles in enhancing athlete performance.

The implications of this research highlight the importance of addressing psychosocial aspects in the development of table tennis training programs and athlete coaching. Coaches and trainers need to pay special attention to fostering intrinsic motivation, creating socially supportive environments, and enhancing athletes' self-perception. Consequently, improvements in athlete motivation and compliance can be expected, ultimately contributing to their performance enhancement in competitions.

Although this study provides valuable insights, there are limitations to consider, including the cross-sectional study method

used and the need for longitudinal research to further validate these findings. Therefore, future research involving long-term observations of athletes is expected to provide a deeper understanding of the relationship between psychosocial factors and motivation as well as compliance in table tennis training.

Thus, this research makes a significant contribution to understanding the factors influencing the performance of table tennis athletes in Indonesia and can serve as a foundation for the development of more effective training and coaching strategies in the future.

E. Acknowledgments

To all parties who have participated in this research, I would like to express my sincere gratitude. Thank you to all the respondents who took the time to participate in this study. Without their contributions and cooperation, this research would not have been possible.

F. Conflict of Interest

There are no conflicts of interest in this research.

References

Alim, A. (2018). Hubungan Motivasi, Attitude, Anxiety Dan Self Efficacy Terhadap Prestasi Atlet Tenis Lapangan Level Junior Dan Senior.

Medikora, XVII(2), 83–90.

<https://journal.uny.ac.id/index.php/me-dikora/article/download/29179/12863>

Aminullah, A., Nurdin, N., & Marzuki, I. (2020). Layanan Konseling Bagi Atlet Persatuan Tenis Meja Pade Angen Mataram 2020. *Abdi Masyarakat*, 2(2), 16–23. <https://doi.org/10.58258/abdi.v2i2.1599>

Dimiyati. (2018). Psikologi Olahraga Metode Latihan Mental Bola Basket. In *Angewandte Chemie International Edition*, 6(11), 951–952. (1st ed., Vol. 2). UNY Press. https://eprints.uny.ac.id/79606/1/fulltext_ext_hermanu_pratisto_21632251024.pdf

Hafidz, A., Suryanto, S., & Priambodo, A. (2022). Problematik Psikososial Pada Atlet Cabang Olahraga Petanque. *Jurnal Psikologi Teori Dan Terapan*, 13(1), 39–50. <https://doi.org/10.26740/jpvt.v13n1.p39-50>

Hariyanto, G., & Firmansyah, D. (2020). *Sejarah, Teknik & Variasi Latihan Pingpong (Tenis Meja)*. Media Nusa Creative.

Hita, I. P. A. D., Ariestika, E., Billy Yacs, B. T. P. W., & Pranata, D. (2020). Hubungan Status Gizi Terhadap Tingkat Aktivitas Fisik PMI Selama

Masa Karantina Covid-19. *Jurnal MensSana*, 5(2), 146–156.
<https://doi.org/10.24036/menssana.050220.07>

Prasetyo, R., & Yunarta, A. (2023). Pengaruh dukungan sosial terhadap motivasi berprestasi akademik dan olahraga pada atlet. *Jurnal Porkes*, 6(1), 177–188.
<https://doi.org/10.29408/porkes.v6i1.5713>

Pratisto, H. (2023). *Analisis Pengaruh Minat Melalui Motivasi Berprestasi Terhadap Kinerja Berolahraga Atlet Sepakbola di Kota Tangerang Selatan* [Universitas Negeri Yogyakarta].
https://eprints.uny.ac.id/79606/1/fulltext_ext_hermanu_pratisto_21632251024.pdf

Wulandari, A. (2014). Karakteristik Pertumbuhan Perkembangan Remaja dan Implikasinya Terhadap Masalah Kesehatan dan Keperawatannya. *Jurnal Keperawatan Anak*, 2(1), 39–43.
<https://jurnal.unimus.ac.id/index.php/JKA/article/view/3954>