



Mental Toughness And Training Motivation Of Hockey Athletes At Slava Club Garut

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ABSTRACT

Mental toughness is a crucial psychological factor that plays a role in increasing athletes' training motivation and consistency in participating in sports development programs. In team sports like hockey, athletes are required not only to possess strong physical and technical abilities, but also to be mentally prepared to face the pressures of training and competition. Therefore, understanding the relationship between mental toughness and training motivation is crucial to supporting the sustainable development of athlete performance. This study aims to analyze the relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut. This study used a quantitative approach with a correlational design to determine the strength and direction of the relationship between variables without introducing experimental treatment. The study population consisted of all hockey athletes actively training at the Slava Club Garut, with a sample size of 30 athletes determined using total sampling. Data collection was conducted using two Likert-scale questionnaires: a mental toughness questionnaire developed based on the conceptual framework of Gucciardi et al. (2009) and a training motivation questionnaire based on Self-Determination Theory by Deci and Ryan (2012). Data analysis was conducted using descriptive statistics, normality tests, and Pearson Product Moment correlation analysis. The results of the study indicate a strong and significant positive relationship between mental toughness and training motivation, with a correlation value of $r = 0.846$ ($p < 0.05$). Furthermore, the coefficient of determination ($R^2 = 0.716$) indicates that mental toughness contributes 71.6% to the variation in athletes' training motivation. These findings indicate that athletes with higher levels of mental toughness tend to have stronger commitment, persistence, and engagement in a structured training program. This study emphasizes the importance of integrating mental training into athlete development programs to increase training motivation and support the development of long-term sports performance.

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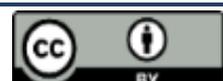
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A. Conception and design of the study;
B. Acquisition of data;
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INTRODUCTION

Hockey is a team sport played by two teams, each with the goal of getting the ball into the opponent's goal using a curved stick. In this game, each player must master



various basic techniques such as pushing, hitting, holding, dribbling, flicking, jabbing, tackling, and lifting. Each technique has a different function in game situations, from controlling the ball to attacking the opponent's goal (Hermawan & Permadi, 2022). Mastering these techniques is a crucial foundation for improving a hockey athlete's performance. As a high-intensity team sport, hockey demands a combination of physical ability, technical skills, game strategy, and effective team coordination. Hockey is a dynamic, fast-paced game, requiring players to perform explosive movements, make quick and accurate decisions, and maintain consistent performance throughout the match (Salman et al., 2025). These conditions make hockey a sport that relies not only on physical ability but also heavily influences the athlete's mental readiness to face the pressures of training and competition. In the process of developing hockey athletes, the training program is a primary factor determining performance improvement. A structured and sustainable training program is designed to improve technical skills, physical condition, and understanding of game tactics. However, the success of a training program is determined not only by the quality of the training itself, but also by the athlete's psychological readiness to undergo the training process (Ilham, 2021). Athletes with good mental readiness tend to be able to consistently follow a training program, cope with training pressure, and maintain motivation over the long term.

From a sports psychology perspective, one psychological factor that significantly influences athlete performance is mental toughness. Mental toughness refers to an individual's ability to maintain focus, manage emotions, and demonstrate perseverance and confidence when faced with pressure or difficulties in training or matches (Gucciardi et al., 2009). Athletes with high levels of mental toughness are generally better able to handle competitive situations, demonstrate emotional stability, and bounce back after failure. In addition to mental toughness, training motivation is also an important psychological factor in the athlete development process. Training motivation can be defined as the internal and external drive that drives athletes to train in a disciplined, consistent, and performance-oriented manner (Weinberg & Gould, 2023). Athletes with high levels of training motivation typically demonstrate a strong commitment to their training program, consistently attend training sessions, and exert maximum effort in each training session. Conversely, low training motivation can result in decreased training quality, a lack of consistency in following the training program, and a reduced opportunity for athletes to achieve optimal performance. Within the context of motivation theory, this phenomenon can be explained through the Self-Determination Theory proposed by Deci and Ryan (2012), which states that optimal motivation arises when an individual's basic psychological needs namely autonomy, competence, and social connectedness are met.

In competitive sports, the relationship between mental toughness and training motivation is an important and interesting topic to study. Athletes with strong mental toughness generally have the ability to maintain intrinsic motivation, remain focused on training goals, and are able to cope with the psychological stress that arises during training and competition (Mustopa et al., 2025). Conversely, athletes with low mental

toughness are more likely to experience decreased motivation, lose confidence, and exhibit inconsistent training programs (Weinberg & Gould, 2023).

In the context of hockey, the demands of intensive training and intense competition make mental toughness a crucial component of athlete development. Hockey athletes who are unable to manage the pressure of training often experience decreased motivation, give up easily, and exhibit inconsistent training performance. Therefore, strengthening psychological aspects, particularly mental toughness, is a crucial element in increasing hockey athletes' training motivation. Initial observations of hockey athletes at the Slava Club Garut revealed varying levels of training motivation among athletes. Some athletes demonstrated high levels of training enthusiasm, consistent attendance, and enthusiasm for participating in training programs. However, others appeared less motivated when faced with demanding physical and mental training. This phenomenon indicates that psychological factors may play a role in influencing athletes' training motivation. Furthermore, development programs at the club level generally emphasize physical aspects, technique, and game strategy, while the psychological aspects of athletes often receive insufficient attention. Effective athlete development requires a comprehensive approach that encompasses physical, technical, tactical, and psychological aspects in an integrated manner (Gould & Maynard, 2019). Therefore, research examining the relationship between mental toughness and training motivation is crucial for providing a scientific understanding of the role of psychological factors in hockey athlete development. Over the past few decades, research in sports psychology has shown that mental factors play a crucial role in determining athlete performance. Mental toughness has been identified as one of the key psychological characteristics that differentiates elite athletes from non-elite athletes (Gucciardi et al., 2015). Athletes with high mental toughness are able to maintain optimal performance despite facing high competitive pressure.

Previous research has shown that mental toughness is closely related to various psychological variables such as motivation, self-confidence, stress resilience, and the ability to manage emotions (Cowden et al., 2020). In the context of sports training, mental toughness is also associated with athletes' persistence and consistency in following long-term training programs. Several empirical studies also show a positive relationship between mental toughness and athletes' intrinsic motivation (Mahoney et al., 2014). Athletes with high mental toughness tend to have a strong internal motivation to continuously develop and improve their performance. Furthermore, mental toughness also contributes to increased training discipline, management of competitive pressure, and the ability to overcome failure in sports (Nicholls et al., 2019). On the other hand, training motivation has become a crucial topic in sports psychology studies. Research shows that high motivation can improve training quality, athlete engagement in training programs, and the success of sporting achievements (Ryan & Deci, 2017). Motivation also plays a role as a driving factor that determines the extent to which athletes are able to maintain commitment to training programs over the long term.

In the context of team sports, training motivation is influenced not only by individual factors but also by social factors such as coach support, relationships between

players, and the club environment (Isoard-Gauthier et al., 2016). Therefore, a psychological approach to athlete development needs to consider the interaction between individual factors and the training environment. Recent research in sports psychology also emphasizes the importance of integrating physical and psychological aspects in the athlete development process. This approach, known as holistic athlete development, emphasizes that athlete performance is influenced not only by physical ability but also by mental readiness and intrinsic motivation (Gould et al., 2021).

Although extensive research has been conducted on mental toughness and athlete motivation, most studies have focused on elite athletes or specific sports such as soccer, athletics, and tennis. Research specifically examining the relationship between mental toughness and training motivation in the context of hockey is still relatively limited. Furthermore, most previous studies have focused on the relationship between mental toughness and competitive performance, while the relationship between mental toughness and training motivation has not been widely explored empirically. Yet, training motivation is a crucial factor influencing an athlete's long-term development.

Research examining this phenomenon at the club level is also very limited, particularly in the context of hockey in Indonesia. Therefore, research is needed that can provide empirical evidence regarding the relationship between mental toughness and training motivation in hockey athletes within the context of club coaching.

Therefore, this study seeks to fill this gap by examining the relationship between mental toughness and training motivation in hockey athletes at Slava Club Garut. This research is expected to provide theoretical contributions to the development of sports psychology studies and practical contributions for coaches and club administrators in improving the quality of athlete coaching. Based on the identified research problems and gaps, this study aims to analyze the relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut. Specifically, this study seeks to identify the extent to which athletes' mental toughness contributes to their motivation to consistently and effectively follow training programs.

Theoretically, this study is expected to enrich the literature in the field of sport psychology, particularly regarding the relationship between mental toughness and training motivation within the framework of Self-Determination Theory. This research also contributes to understanding how athletes' psychological strengths influence their commitment to long-term training programs. Practically, the results of this study are expected to serve as a strategic reference for coaches and sports club managers in designing more comprehensive athlete development programs. By understanding the role of mental toughness in increasing training motivation, coaches can integrate mental strengthening programs into existing training systems. Thus, the novelty of this research lies in the focus of the study which specifically examines the relationship between mental toughness and training motivation in club-level hockey athletes, as well as providing empirical evidence in the context of hockey sports in Indonesia.

METHODS

This study used a quantitative approach with a correlational design to analyze the relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut. A correlational design was chosen because the study aimed to identify the strength and direction of the relationship between two variables without any treatment or manipulation of the subjects. In correlational research, researchers only observe and measure naturally occurring variables to empirically determine the relationship between them (Creswell & Creswell, 2018; Sugiyono, 2019). A quantitative approach was used because the research data were obtained in the form of questionnaire scores, which could be statistically analyzed to identify patterns of relationships between athletes' mental toughness and their motivation to participate in a hockey training program.

This study employed a cross-sectional design, where data collection was conducted at a single measurement point by distributing questionnaires to study respondents. This approach is widely used in sports psychology research to identify relationships between psychological variables in the context of athlete development (Nicholls et al., 2019; Cowden et al., 2020). Through this design, researchers can obtain an empirical picture of the psychological state of athletes related to mental toughness and training motivation within a club sports coaching environment.

The population in this study was all hockey athletes actively participating in the training program at Slava Club Garut. This population was selected because the athletes are directly involved in the regular training process and therefore have relevant experience with the variables studied, namely mental toughness and training motivation. The sampling technique used total sampling, a technique for determining a sample by selecting all members of the population as research respondents (Sugiyono, 2019). This method was chosen because the population size was relatively limited and still within the reach of the researcher. Therefore, all hockey athletes who are members of Slava Club Garut were selected as study respondents.

The research instrument used in this study was a psychological questionnaire consisting of two parts: a mental toughness questionnaire and a training motivation questionnaire. The mental toughness instrument was developed based on the concept of mental toughness proposed by Gucciardi et al. (2009) and developed in modern sports psychology research. The indicators used include self-confidence in facing strenuous training, the ability to control emotions during training or competition, focus on training goals, persistence and discipline in implementing training programs, and the ability to bounce back after failure (resilience). The concept of mental toughness has been widely used in sports research as a psychological factor contributing to athlete performance and resilience to training stress (Gucciardi et al., 2015; Cowden et al., 2020).

Meanwhile, the training motivation instrument was developed based on Self-Determination Theory (SDT) developed by Deci and Ryan (2012). This theory explains that individual motivation is influenced by the fulfillment of three basic psychological needs: autonomy, competence, and relatedness. In the sports context, fulfilling these needs has

been shown to contribute to increased intrinsic motivation, training engagement, and athlete commitment to long-term training programs (Ryan & Deci, 2017; Teixeira et al., 2020). Both questionnaires used a five-level Likert scale consisting of strongly agree, agree, undecided, disagree, and strongly disagree, allowing researchers to quantitatively measure levels of mental toughness and exercise motivation.

The research procedure was conducted through several systematic stages. The first stage was a preliminary study and literature review to identify research variables and develop a conceptual framework. The second stage was the development of research instruments based on theoretical indicators of mental toughness and Self-Determination Theory. The instruments were then tested for validity and reliability to ensure they were suitable for use in research. Validity testing was performed using Pearson Product Moment correlation to measure the ability of each statement item to represent the research variables, while reliability testing was conducted using Cronbach's Alpha coefficient to determine the instrument's internal consistency (Field, 2018).

Data collection was conducted by distributing questionnaires to hockey athletes at the Slava Club Garut, who participated in the study. The collected data were then analyzed using descriptive and inferential statistics. Descriptive statistics were used to describe the characteristics of the research data, while inferential statistics were used to examine the relationship between mental toughness and training motivation.

Before conducting the correlation analysis, the data were first tested using a normality test to determine the appropriate analysis technique. If the data were normally distributed, the relationship between variables was analyzed using Pearson Product Moment Correlation; if the data were not normally distributed, Spearman Rank Correlation was used (Hair et al., 2019). Furthermore, this study calculated the coefficient of determination (R^2) to determine the contribution of mental toughness to athletes' training motivation. This correlational analysis approach allowed researchers to understand the extent to which athletes' psychological states during training relate to their motivation to consistently and effectively follow a hockey training program.

RESULTS AND DISCUSSION

Result

The analysis of the research results was conducted through several statistical stages, namely descriptive statistical analysis, data normality testing, and correlation analysis between the variables of mental toughness and training motivation in hockey athletes at the Slava Club Garut. This analysis aimed to provide an empirical overview of the athletes' psychological condition and to examine the relationship between the two research variables.

Descriptive Statistics

Descriptive statistical analysis was conducted to provide a general overview of the levels of mental toughness and training motivation in the hockey athletes who participated in the study. Descriptive statistics included the minimum, maximum, average (mean), and standard deviation values for each research variable. The results of the descriptive statistical analysis are presented in Table 1 below.

Table 1
 Descriptive Statistics of Mental Toughness and Training Motivation

Variable	N	Min	Max	Mean	Std. Deviation
Mental Toughness (X)	30	92	140	113.23	12.051
Training Motivation (Y)	30	96	146	113.57	13.753
Valid N (listwise)	30				

Based on the descriptive statistical analysis results in Table 1, the mental toughness (X) variable obtained an average value of 113.23 with a standard deviation of 12.051. Mental toughness scores ranged from a minimum of 92 to a maximum of 140 across the 30 hockey athletes who participated in the study. This average value indicates that, in general, hockey athletes at Slava Club Garut have a fairly good level of mental toughness. Meanwhile, the training motivation (Y) variable showed an average value of 113.57 with a standard deviation of 13.753. Training motivation scores ranged from a minimum of 96 to a maximum of 146. This relatively high average value indicates that most athletes exhibit a good level of training motivation in participating in the club's training program. Furthermore, the relatively close average values of both variables indicate that the development of mental toughness and training motivation in the athlete sample tends to occur proportionally. The relatively small standard deviation also indicates that the data distribution is not extremely skewed. In other words, most athletes have relatively consistent levels of mental toughness and training motivation.

Normality Test

A normality test was conducted to determine whether the research data was normally distributed. The normality test in this study used the One-Sample Kolmogorov-Smirnov Test with a significance level of 0.05. The results of the normality test are presented in Table 2 below.

Table 2
 One-Sample Kolmogorov-Smirnov Test

	Unstandardized Residual
N	30
Normal Parameters	
Mean	.0000000
Std. Deviation	7.33355831
Most Extreme Differences	
Absolute	.080
Positive	.080
Negative	-.073
Kolmogorov-Smirnov Z	.438
Asymp. Sig. (2-tailed)	.991

Based on the results of the normality test using the Kolmogorov-Smirnov Test, the Asymp. Sig. (2-tailed) value was 0.991, which is greater than the 0.05 significance level. Therefore, it can be concluded that the residual data in this study are normally distributed. The Kolmogorov-Smirnov Z value of 0.438, with a sample size of 30 respondents, indicates no significant difference between the data distribution and a normal distribution. This is further supported by the residual mean value of 0.000 and the standard deviation of 7.33355831, indicating that the data distribution is within normal limits.

With the assumption of data normality met, parametric statistical analysis can be used to examine the relationship between the research variables. This aligns with the opinion of Priadana and Sunarsi (2021), who stated that if the significance value in the Kolmogorov-Smirnov test is greater than 0.05, the data can be considered normally distributed and meet one of the basic assumptions in parametric statistical analysis.

Correlation Test

A correlation analysis was conducted to determine the relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut. The correlation test in this study used Pearson Product Moment Correlation because the data met the assumption of normality. The results of the correlation analysis are presented in Table 3 below.

Table 3

Pearson Correlation Between Mental Toughness and Training Motivation

Variable	Mental Toughness	Training Motivation
Mental Toughness	1	.846
Training Motivation	.846	1
Sig. (2-tailed)	-	.000
N	30	30

Based on the results of the Pearson correlation analysis in Table 3, the correlation coefficient was obtained at $r = 0.846$ with a significance value of $p = 0.000$. This significance value is less than 0.05, thus concluding that there is a significant positive relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut. The correlation coefficient of 0.846 indicates that the relationship between the two variables is categorized as very strong. This means that athletes with higher levels of mental toughness tend to have higher training motivation. The results of this study indicate that mental toughness is an important psychological factor that can influence athletes' motivation levels in consistently and optimally implementing a training program.

Coefficient of Determination

In addition to the correlation analysis, this study also calculated the coefficient of determination (R^2) to determine the contribution of mental toughness to training motivation. The analysis results showed an R^2 value of 0.716, indicating that mental toughness contributed 71.6% to the variation in training motivation among hockey athletes at the Slava Club Garut. This substantial percentage indicates that mental toughness plays a dominant role in influencing athletes' motivation to train actively and consistently. Meanwhile, the remaining 28.4% was influenced by other factors not examined in this study, such as coach support, the training environment, the athlete's physical condition, competition experience, and other psychological factors. These findings indicate that developing mental aspects in hockey athlete development is a crucial factor in increasing training motivation and supporting sustainable athlete performance improvement.

Discussion

The results of this study indicate a very strong positive relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut, with a correlation coefficient of $r = 0.846$ and a significance level of $p < 0.05$. This finding

indicates that the higher the level of mental toughness possessed by athletes, the higher their motivation to participate in training programs. Furthermore, the coefficient of determination analysis showed that mental toughness contributed 71.6% to the variation in athletes' training motivation. This indicates that mental toughness is a psychological factor that plays a crucial role in shaping athletes' commitment and consistency in sports training programs. This study's findings align with various previous studies showing that mental toughness is closely related to intrinsic motivation, persistence, and commitment in the context of sport. The concept of mental toughness was first systematically explained by Weinberg, who stated that mental toughness enables athletes to maintain focus, self-confidence, and determination in the face of pressure and challenges during training and competition (Weinberg, 1989). Athletes with high levels of mental toughness tend to be better able to manage psychological stress, thus remaining motivated to train consistently and achieve their performance goals.

From a modern sports psychology perspective, mental toughness is understood as a psychological capability involving several key components, such as confidence, control, commitment, and challenge (Gucciardi et al., 2015). Individuals with high levels of mental toughness typically have better emotional control, are able to maintain focus on training goals, and have a strong commitment to continuous improvement. Gucciardi et al. (2012) stated that athletes with high levels of mental toughness tend to demonstrate higher levels of self-control, commitment, and self-confidence, which theoretically aligns with the construct of motivation in the context of achieving sporting achievement. The relationship between mental toughness and training motivation can also be explained through the perspective of Self-Determination Theory (SDT) developed by Deci and Ryan. This theory explains that intrinsic motivation develops when an individual's three basic psychological needs are met: autonomy, competence, and relatedness (Ryan & Deci, 2017). In the context of sports, mental toughness can strengthen athletes' perceptions of competence because they feel more capable of coping with the pressures of training and the challenges of competition. When athletes feel capable and confident in their abilities, their intrinsic motivation to train also increases. Research conducted by Cowden (2017) found that mental toughness is a significant predictor of self-determined motivation and continued participation in sports. Athletes with high levels of mental toughness tend to demonstrate stronger levels of intrinsic motivation and a higher commitment to long-term training programs. This suggests that mental toughness functions as a psychological resource that helps athletes maintain their engagement in sports training activities.

Furthermore, other studies have shown that mental toughness plays a crucial role in increasing athletes' resilience and persistence when facing adversity during training and competition (Nicholls et al., 2019; Cowden & Meyer-Weitz, 2016). Athletes with strong mental toughness are generally better able to overcome failure, manage stress, and maintain motivation despite high competitive pressure. This ability is particularly important in team sports like hockey, which demand consistent performance and the ability to adapt to dynamic game situations.

In the context of hockey, the high physical and technical demands are often accompanied by significant psychological stress. Athletes must be able to make quick decisions, maintain concentration, and collaborate with teammates in complex game situations (Salman et al., 2025). Therefore, mental aspects such as mental toughness are crucial factors in supporting athletes' readiness to face such pressure. Athletes with strong mental toughness tend to be able to maintain their focus and motivation throughout training and competition.

The findings of this study also support empirical studies showing that mental toughness has a positive influence on athletes' training motivation and engagement in sports development programs (Gucciardi et al., 2017; Cowden et al., 2020). Athletes with high levels of mental toughness typically demonstrate higher levels of training discipline, more consistent training attendance, and a stronger commitment to long-term training goals. This explains why mental toughness can be a crucial factor in enhancing training motivation in hockey athletes.

Furthermore, research by Nicholls et al. (2017) shows that mental toughness is also related to the coping strategies athletes use when facing competitive pressure. Athletes with high levels of mental toughness tend to use more adaptive coping strategies, such as solution-focused, emotional regulation, and maintaining self-confidence. These effective coping strategies enable athletes to maintain their motivation despite challenging training situations.

In the context of athlete development at the club level, the results of this study provide important implications for coaches and sports organization administrators. Athlete development programs often focus more on improving physical abilities, technique, and game tactics, while psychological aspects receive insufficient attention (Gould & Maynard, 2019). However, research shows that developing mental aspects, such as mental toughness, can significantly contribute to athlete motivation and performance. A holistic athlete development approach emphasizes that athlete development must encompass the integration of physical, technical, tactical, and psychological aspects (Gould et al., 2021). In this context, coaches can integrate mental strengthening programs such as focus training, emotional control, visualization, and self-confidence development into athlete training programs. This strategy is believed to improve athletes' mental toughness while strengthening their motivation to complete the training program.

Furthermore, a supportive training environment also plays a crucial role in increasing athlete motivation. Research shows that coach support, positive relationships between players, and a conducive motivational climate can increase athletes' intrinsic motivation to train (Isoard-Gauthier et al., 2016; Ryan & Deci, 2017). Therefore, the development of mental toughness depends not only on individual factors but is also influenced by the social environment in the athlete development process.

Overall, the results of this study reinforce the theoretical assumption that mental toughness is a psychological resource that plays a crucial role in enhancing athletes' training motivation. The strong relationship between mental toughness and training

motivation in hockey athletes at the Slava Club Garut suggests that strengthening mental toughness can be an effective strategy for improving the quality of athlete development.

Therefore, this study makes an important contribution to enriching the study of sports psychology, particularly regarding the relationship between mental toughness and training motivation in the context of team sports. Furthermore, the findings of this study also provide practical implications for coaches and sports club managers in designing more comprehensive training programs that integrate the development of athletes' psychological aspects.

CONCLUSION

Based on the statistical analysis, this study concluded that there is a significant and strong positive relationship between mental toughness and training motivation in hockey athletes at the Slava Club Garut. The correlation analysis using Pearson Product Moment showed a correlation coefficient of $r = 0.846$ with a significance level of $p < 0.05$. This value indicates that the higher the level of mental toughness possessed by athletes, the higher their motivation to participate in training programs. This finding indicates that mental toughness is a psychological factor that plays a crucial role in supporting athlete engagement in sports training activities.

Furthermore, the coefficient of determination analysis ($R^2 = 0.716$) showed that mental toughness contributed 71.6% to the variation in training motivation in hockey athletes at the Slava Club Garut. This substantial contribution indicates that mental toughness is a key determinant in shaping athletes' training motivation. Meanwhile, the remaining 28.4% was influenced by other factors not analyzed in this study, such as coach support, training environment, competition experience, athlete physical condition, and other psychological factors that can also influence training motivation.

Conceptually, the findings of this study reinforce the theoretical assumption that mental toughness serves as a crucial psychological resource that can enhance intrinsic motivation, persistence, and commitment in athletes to sustainably follow a training program. These findings are also consistent with the mental toughness conceptual framework proposed by Gucciardi et al. (2009) and the motivational principles of Self-Determination Theory developed by Deci and Ryan (2012), which emphasize that psychological factors play a crucial role in increasing individual engagement in activities that require long-term commitment, such as sports training.

Practically, the results of this study provide important implications for coaches and sports practitioners at Slava Club Garut to emphasize not only physical aspects, technique, and game strategy in athlete development programs but also to systematically integrate mental training programs. Strengthening mental aspects such as developing self-confidence, emotional control, focusing on training goals, and the ability to bounce back from failure is believed to increase athletes' mental toughness while maintaining training motivation in the long term, thus supporting the continuous improvement of athlete performance.

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Finally, the author hopes that the results of this study will positively contribute to the development of science, particularly in the fields of sports psychology and athlete coaching. They will also serve as a reference for coaches, sports practitioners, and future researchers in understanding the role of mental toughness and training motivation in improving the quality of hockey athlete coaching.

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