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MODEL FOR PROMOTING THE HEALTH OF THE CHAMPION'S MENTAL CAPACITY THROUGH IMPROVING THE QUALITY OF LIFE TO THE ACHIEVEMENTS OF THE NATIONAL ELITE ATHLETES OF THE PARALYMPIC COMMITTEE AT THE NATIONAL PARALYMPIC COMMITTEE INDONESIA (NPCI)

Arista Adi Nugroho[1]
[1]Postgraduate School, Universitas Sebelas Maret Surakarta, Indonesia.

Furqon Hidayatullah[2]
[2]Postgraduate School, Universitas Sebelas Maret Surakarta, Indonesia.

Suminah[3]
[3]Postgraduate School, Universitas Sebelas Maret Surakarta, Indonesia.

Fadilah Umar[4]
[4]Postgraduate School, Universitas Sebelas Maret Surakarta, Indonesia.
aristaadinugrohos3pp@student.uns.ac.id

ABSTRACT

Elite national Paralympic athletes are required not only to achieve optimal sporting performance but also to maintain sustainable quality of life and mental health. This study aims to analyze and develop a health promotion model of champion mental capacity in relation to the performance of elite national Paralympic athletes at the National Paralympic Committee of Indonesia (NPCI), with quality of life as a mediating variable. The study employed a mixed-methods approach with a sequential explanatory design. The qualitative phase explored the dimensions and characteristics of champion mental capacity, followed by a quantitative phase to test the proposed structural model.

The research object comprised champion mental capacity health promotion, quality of life, and athletic performance, while the research subjects were elite national athletes with disabilities affiliated with NPCI. Data were collected through in-depth interviews and document analysis in the qualitative phase, and structured questionnaires in the quantitative phase, including a researcher-developed champion mental capacity instrument and the WHOQOL-BREF to assess quality of life. Quantitative data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with bootstrapping.

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The results indicate that champion mental capacity health promotion has a strong and significant effect on quality of life (β = 0.922, p < 0.001), and quality of life significantly influences athletic performance (β = 1.227, p < 0.001). The indirect effect through quality of life is also significant (β = 1.132, p < 0.001), demonstrating a dominant partial mediation. The model explains 15.2% of performance variance with high predictive relevance (Q² = 0.671). These findings highlight that improving Paralympic athletes' performance is more effectively achieved through strengthening quality of life via champion mental capacity health promotion.

Keywords: health promotion, champion mental capacity, quality of life, athletic performance, Paralympic athletes, PLS-SEM.

INTRODUCTION

Elite athletes face extremely high physical, emotional, and psychological demands during their competitive careers. Not only are the physical aspects that determine success, but mental health and psychological capacity It is now recognized as an important determinant in elite sports performance (Aditya et al., 2025; Aqobah & Rhamadian, 2022; Gatarina Nurani Oktavia et al., 2023; Rhamadian, 2022). Recent meta-analyses confirm that Psychological interventions such as mental skills training, positive psychology, and psychosocial strategies have a positive effect on the mental well-being of elite athletes (e.g. mental wellbeing) and potentially support superior performance in competition (Munawarah, 2023).

Mental toughness or mental toughness It is a psychological component that consists of the ability to regulate emotions, maintain focus under pressure, and maintain motivation throughout competition. Recent narrative reviews refer to mental toughness as Significant factors in sports performance because of its ability to increase resistance to competitive pressure and consistency of performance (M. Lee & Kim, 2023).

Empirical studies on elite athlete populations show that Mental toughness also reduces anxiety levels, psychological stress, as well as the risk of burnout and depressive symptoms, especially when athletes face high competitive stress (Madigan & Nicholls, 2017). Describing the relationship between mental capacity and other psychological outcomes is also important because it can guide holistic and evidence-based health promotion intervention strategies (Babu, 2022).

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In addition, Quality of Life not just a subjective parameter of well-being, but also a health indicator that reflects the balance between an individual's physical, emotional, and social functions (Mustafa et al., 2020). Research on athletes with disabilities shows that competitive participation has a positive relationship with total quality of life, including mental and social aspects, which in turn are related to sports performance.

Although the importance of psychological aspects and quality of life is increasingly recognized in the context of general sport, studies that specifically explore the interaction between Promotion of psychological health, Mental Capacity Champion, Quality of life, and Performance in athletes with relatively limited disabilities (Ahmadi et al., 2025). Some local studies on athletes with disabilities tested the relationship between mental toughness and competition anxiety or motivation to perform, but the scope was still partial, not integrating variables Health Promotion and Quality of life as a mediator or the main mechanism for sports achievement (Wahyuni et al., 2024).

In addition, there is almost no research in Indonesia, especially one that uses a holistic structural model approach, that at the same time explains how psychological health promotion can strengthen the mental capacity of champions, improve the quality of life, and improve the achievements of elite paralympic athletes. Thus, there are important scientific gaps that need to be addressed by this study.

The urgency of this research lies in the need to integrate psychosocial variables and achievement in the development of athletes with disabilities comprehensively. Various empirical studies on general athletes have confirmed that mental skills play an important role in improving psychological well-being and sports performance (U.-K. Lee & Yoo, 2023), but studies that simultaneously incorporate health promotion as an intervention strategy and analyze its effects on quality of life and achievement are still very limited, especially in athletes with disabilities (Ahmadi et al., 2025; Isidoro-Cabañas et al., 2023). On the other hand, the policy of coaching athletes with disabilities in Indonesia is still dominated by physical and technical approaches, without the support of a measurable and evidence-based psychological intervention framework (Abidin & Yuwono, 2021). This condition shows that there is a gap between the real needs of athletes and the coaching practices applied. In addition, findings from a meta-study and research on the psychological structure of athletes confirm the importance of a systematic health promotion approach to reduce competitive stress, prevent burnout, and increase stress resilience (Ferreira et al., 2024). This approach is becoming increasingly relevant for Paralympic athletes who face high

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competition pressures accompanied by distinctive physical, social, and psychosocial barriers, requiring an intervention model that is not only performance-oriented, but also on the quality of life and career sustainability of athletes.

Based on the findings of the latest research, Mental toughness and psychological strategies such as psychological skills training, emotion regulation, mindfulness, and psychological flexibility have been proven to contribute significantly to Mental Well-Being of Elite Athletes and potentially improve sports performance (Rogowska & Tataruch, 2024; Wang et al., 2025) The evidence is supported by systematic review and meta-analysis in sports psychology and sports medicine showing that psychological interventions have a positive effect on psychological well-being, stress resilience, and athlete performance readiness (Purcell et al., 2019; Rice et al., 2016; Röthlin et al., 2023). In addition, Quantitative correlational and longitudinal research It shows that mental toughness and psychological flexibility are positively correlated with quality of life, consistency of performance, and the ability of athletes to cope with competitive pressures (Lundqvist, 2011). Nevertheless, most of those studies focused on nondisability athletes and placed psychological variables partially. Integrative research linking health promotion as an intervention approach, champion mental capacity, quality of life, and achievement of national athletes with disabilities is still very limited, both in terms of methodological design and the context of sports policy. Therefore, this research is feasible to fill the scientific gap through a comprehensive structural model approach, thus producing Scientifically relevant and applicative conceptual models for the development of Paralympic athletes in Indonesia.

RESEARCH METHODS

Research Design

This study uses a mixed-methods approach, with a sequential explanatory design, which is research that begins with a qualitative approach to explore concepts and followed by a quantitative approach to test models empirically. This design was chosen to gain a comprehensive understanding of Mental Capacity Champion and test Health promotion model which links the mental capacity of champions, quality of life, and achievements of elite Paralympic athletes (O'cathain et al., 2010; Varlık, 2025).

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Research Objects and Subjects

The research objects include Promotion of Mental Capacity Health Champion, Quality of life, and Athlete Achievements. The subjects of the study are National elite athletes with disabilities who are members of the National Paralympic Committee Indonesia (NPCI). The determination of the research subject using Total Sampling Technique, by involving all national elite athletes who meet the criteria and are involved in the national training camp program (Ethan, 2016; Low et al., 2025).

Data Collection Techniques

Data collection was carried out in two stages. At the qualitative stage, data was obtained through in-depth interviews and documentation studies involving athletes, coaches, and related stakeholders to identify the dimensions and characteristics of the champion's mental capacity. The findings of this stage are used as a basis for the preparation of psychometric instruments of the mental capacity of the champion.

On Quantitative level, data collected using Structured questionnaire, which consists of the champion mental capacity instrument developed by the researcher and the WHOQOL-BREF to measure quality of life (Cahyaningrat & Lukmanulhakim, 2020; Lidya et al., 2022; Nur Izzah & Risqi Yudistira, 2024; Nurhidayah et al., 2020; Setyowati et al., 2023). Athlete performance data is obtained through Sports Achievement Indicators relevant and documented in the NPCI.

Data Analysis Techniques

Qualitative data are analyzed using Thematic Analysis to identify the main patterns and themes related to the mental capacity of the champion. Quantitative data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) (Chua, 2024; Ghildiyal et al., 2022; Ghozali, 2017). The analysis includes the evaluation Measurement model (validity and reliability test), testing Model Structural, as well as procedures bootstrapping to test for direct influences, indirect influences (mediation), effect size (f^2), predictive relevance (Q^2), and multicollinearity test using Variance Inflation Factor (VIF). The entire quantitative analysis is carried out with the help of software SmartPLS.

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RESEARCH RESULTS

Evaluation of Measurement Model

The results of the evaluation of the measurement model showed that all indicators in the construct of health promotion, mental capacity, mental capacity, and athlete achievement met the criteria of validity and reliability. The load factor values of all indicators are above the minimum recommended limit. The Composite Reliability (CR) and Cronbach's Alpha values on each construct show good internal consistency. In addition, the Average Variance Extracted (AVE) value indicates the fulfillment of convergent validity, while the discriminant validity test shows that each construct has empirically distinct characteristics.

Table 1. Construct Reliability Test Results

	Cronbach's Alpha	**Composite Reliability**	**Average Variance Extracted (AVE)**
Performance	0,881	0,927	0,811
Champion Mental Health Promotion	0,976	0,978	0,761
Quality of Life	0,985	0,986	0,745

Criteria: Cronbach's Alpha ≥ 0,70; Composite Reliability ≥ 0,70

The test results showed that all variables had *Cronbach's Alpha* and *Composite Reliability* values above 0.70, so the research construct was declared reliable. *Cronbach's Alpha* and *Composite Reliability* values of all variables were above 0.70. This shows that the research instrument has good internal consistency, so that the entire construct is declared reliable.

Structural Evaluation Model

The results of structural model analysis using PLS-SEM showed that the promotion of the mental capacity of the champion had a very strong and significant effect on the quality of life of athletes ($\beta = 0.922$; $T = 89.320$; $p < 0.001$; $f^2 = 5.693$). Furthermore, quality of life had a significant effect on athletes' achievement ($\beta = 1.227$; $T = 14.365$; $p < 0.001$; $f^2 = 1.477$).

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Table 2. Statistical Test Results Direct Relationship (Direct Effect)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Health Promotion of Mental Capacity Champion -> Achievement	-0,343	-0,356	0,102	3,349	0,001
Health Promotion of Mental Capacity Champion -> Quality of Life	0,922	0,922	0,010	89,320	0,000
Quality of Life -> Achievement Scale	1,227	1,237	0,085	14,365	0,000

The direct effect of promoting the mental capacity of the champion on athletes' achievement was also found to be significant, but in a negative direction (β = –0.343; T = 3,349; p = 0.001). The results of the multicollinearity test showed a Variance Inflation Factor (VIF) value of 6.693, which indicates a high correlation between health promotion, champion mental capacity and quality of life.

Mediation Test Results

Indirect effects tests showed that quality of life played a very dominant role as a mediator in the relationship between health promotion, champion mental capacity and athlete achievement (β = 1.132; T = 14,986; p < 0.001). This relationship pattern shows partial mediation with inconsistent mediation, where indirect influence through quality of life is stronger than direct influence.

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Table 3. Statistical Test Results Indirect Relationship (Indirect Effect)

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Mental Health Promotion Champion -> _Kualitas Life -> Achievement	1,132	14,986	0,000

Explainability and Predictive Relevance of the Model

The R^2 value indicates that the model is able to explain 15.2% of the variation in athlete achievement. In addition, the results of the predictive relevance (Q^2) test showed a value of 0.671, which indicates that the model has high predictive relevance in explaining the relationship between the health promotion of the champion's mental capacity, quality of life, and the achievements of elite Paralympic athletes.

DISCUSSION

The Effect of Health Promotion of Champions' Mental Capacity on Athletes' Quality of Life

The results of the study show that Health promotion of the mental capacity of the champion has a very strong and significant effect on the quality of life of elite national Paralympic athletes ($\beta = 0.922$; $p < 0.001$). These findings indicate that strengthening the psychological aspects of athletes, such as emotion regulation, resistance to pressure, confidence, and motivation, contribute directly to the perception of athletes' physical, psychological, and social well-being. Theoretically, mental capacity in the context of sport includes the ability to manage competitive pressure, motivation to perform, emotion regulation, attention focus, and psychological toughness. Previous research has confirmed that psychological factors such as mental toughness, motivation, and stress management contribute greatly to sports performance; for example, mental toughness was seen to make a significant contribution to the achievement of Taekwondo athletes, although the effect was different from the motivational variable (positive correlation) in quantitative correlational studies (Rukman et al., 2024). In the context of sports psychology, these findings support the results systematic review which states that well-being-oriented psychological interventions consistently improve the mental wellbeing of elite athletes (Purcell et al., 2019). Thus, the promotion of the health of the mental capacity of the champion can be understood as an effective preventive and promotive approach in maintaining the quality of life of paralympic athletes.

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The Influence of Quality of Life on Athlete Achievement

The study also found that Quality of life has a significant effect on athletes' achievements (β = 1.227; p < 0.001). These findings suggest that athletes with better psychological and social well-being tend to have more optimal exercise performance. These results reinforce the view that athletes' performance is determined not only by physical readiness and technique, but also by the psychosocial conditions that favor concentration, training consistency, and the ability to manage competition pressure. These findings are consistent with previous research that states that quality of life and mental well-being have a positive relationship with athletes' performance readiness and career sustainability (Lundqvist, 2011; Rice et al., 2016). In the context of Paralympic athletes, quality of life is a crucial factor because athletes face additional challenges in the form of physical and social barriers that can affect performance if not managed adaptively.

The Direct Effect of Health Promotion of Champion's Mental Capacity on Achievement

The results of the analysis show that the direct effect of health promotion of mental capacity on achievement is significant but in a negative direction (β = –0.343; p = 0.001). Methodologically, these findings cannot be interpreted as a substantive negative causal relationship, but rather understood as a consequence of High multicollinearity between health promotion of champions' mental capacity and quality of life (VIF = 6,693). This phenomenon indicates that the contribution of health promotion to achievement does not work directly, but through a mechanism to improve the quality of life. Patterns like this have been widely reported in research-based Structural Equation Modelling, especially when the mediator variable has a very strong relationship with the independent variable (Hair et al., 2019, 2022).

The Role of Quality of Life Mediation in the Relationship between Champion's Mental Capacity and Achievement

The most important finding in the study is that quality of life plays a very dominant mediator in the relationship between health promotion of the mental capacity of the champion and athlete achievement (β = 1.132; p < 0.001). Pattern Partial mediation with inconsistent mediation character shows that increasing the mental capacity of the champion will be more effective in improving achievement if followed by improving the quality of life of athletes. These results reinforce a holistic approach to coaching sports achievement, which places athletes' well-being as a prerequisite for optimal performance (Durrani et al., 2014; Giles et al., 2020; Greg Wells, 2016;

Scott et al., 2025). These findings are in line with the athlete well-being model (athlete wellbeing models) which affirms that peak performance is sustainable only if the psychological well-being of the athlete is maintained (Laurel et al., 2023; Wang et al., 2025).

Implications of the Champion Mental Health Promotion Model

Overall, the results of this study produce a model for promoting the health of the champion's mental capacity based on quality of life that is theoretically and practically relevant. This model emphasizes that the development of Paralympic athletes should not only be oriented towards short-term achievements, but also on improving the quality of life as a foundation for sustainable achievement. These findings make an important contribution to the development of policies for the development of athletes with disabilities in Indonesia, which have tended to focus on physical and technical aspects, by integrating mental health promotion as a strategic component.

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