Exploring Motivation and Resilience Among Badminton Players: A Correlational Study

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Abstract

This study aimed to explore the impact of intrinsic and extrinsic motivation, as well as perceived stress, on athlete resilience. A cross-sectional study was conducted with 250 badminton players (18–37 years) in Pakistan, using self-report questionnaires to assess motivation profiles (SMS-6), perceived stress (PSS-10), and resilience (Athlete Resilience Checklist; ARC). The analysis revealed that athletes exhibited a relatively high level of resilience (M = 85.89) and a moderate level of perceived stress (M = 31.99). Intrinsic motivation showed a positive but non-significant correlation with resilience, while extrinsic motivation, particularly external regulation (r = 0.345, p < 0.01), demonstrated a significant positive association. Identified regulation had a significant negative correlation with resilience (r = -0.228, p = 0.047), and motivation showed a significant negative correlation (r = -0.257, p < 0.001). Interestingly, the "lack of self-efficacy" subcomponent of perceived stress exhibited a significant positive correlation with resilience (r = 0.454, p < 0.001). These findings suggest that perceived stress, particularly related to self-efficacy, plays a significant role in shaping resilience among athletes.

Keywords: Motivation, Resilience, Badminton, Perceived Stress, Intrinsic Motivation, Extrinsic Motivation, Self-efficacy, Stress-coping for Athletes.

Introduction

Sports participation is a globally popular activity that has garnered significant attention recently, particularly in sports psychology. Researchers have increasingly recognized the pivotal role of motivation in influencing athletes' performance and overall well-being (Madigan et al., 2016). However, while motivation's impact on sports-related difficulties, such as stress and anxiety, has been acknowledged, in-depth investigations into its influence on athletes' resilience remain scarce (Trigueros et al., 2020), both at a social or physical level and at a psychological level (Raza et al., 2022).

The concept of intrinsic motivation, as first described by White (1959) and later expanded upon by De Charms (2013), highlights individuals' engagement in activities for the sake of enhancing

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self-ability, gaining experiences, and experiencing feelings of comfort and fulfilment. On the other hand, extrinsic motivation emphasizes the importance of external rewards or pressures as motivators for engaging in specific activities (Wehmeyer, 2022). In sports, the distinction between intrinsic and extrinsic motivation gains particular significance, as it can significantly influence athletes' overall experience and dedication to their chosen sport (Botte et al., 2016). The inherent satisfaction derived from intrinsic motivation plays a crucial role in an athlete's commitment to sports and their ability to endure the extensive development required to attain expertise in a sport (Macnamara et al., 1016). Despite the positive impact of sports participation on mental health, athletes often face challenges balancing school, work, and rigorous training, leading to potential psychological issues such as stress, burnout, anxiety, and depression (Gustafsson at el., 1017). Stress is a common occurrence among athletes, and studies have indicated that they experience stress more frequently than individuals in other populations (Fletcher & Arnold, 2016).

Resilience emerges as a critical mechanism enabling athletes to respond to risk situations optimistically, adapt to problems, and rebound from setbacks such as injuries and sporting failures (Galli & Gonzalez, 2015). Defined as a set of personal qualities that enable individuals to overcome stressful and adverse situations (Maddi & Maddi, 2013), resilience is crucial in promoting athletes' positive growth at social, behavioural, and emotional levels (Sarkar & Fletcher, 2014). Resilience is a protective mechanism arising from specific personality traits, such as self-esteem, adaptive coping strategies, available resources, and social support (Galli & Gonzalez, 2015). Bouncing back and overcoming adversity characterizes resilient individuals who demonstrate composure, motivation, and energetic responses when facing challenges (Sarkar & Fletcher, 2013).

In light of the significance of motivation and resilience in the context of sports, it becomes essential to explore their interplay and the potential impact on athlete performance and well-being. This cross-sectional study aims to investigate the motivation profiles of badminton players and examine their resilience levels. By understanding the motivational factors that drive athletes and their resilience to overcome challenges, we can gain valuable insights into enhancing their performance and mental health.

Methodology

Research Design

The study used a descriptive cross-sectional design and a simple, non-probability selection technique, selecting participants based on their availability and desire to participate.

Study Location

This study was conducted in different cities of Pakistan, namely "Sheikhupura" and "Lahore, Islamabad, Karachi, Sialkot, Gujranwala, and Peshawar," which are located in other regions of the country from various sports clubs related to badminton.

Participants

The sample size was 250 badminton players aged 18–37 (mean age 23–27), 58% male and 42% female. The study also targets badminton players. The selected participants are typical of the target group and have relevant badminton experience, boosting the study's validity and reliability.

Inclusion criteria

The study was comprised of participants aged 18-37 years old, all badminton players. Before inclusion in the study, each participant had undergone learning or teaching badminton. The research examined the relationships between motivation profiles and resilience levels in badminton players.

Instruments/Measures

The following instruments/Measures were used in this study.

Demographic Sheet: A demographic sheet was developed to include gender, age, class, and city.

The Sports Motivation Scale (SMS) is a well-known tool used to assess an athlete's motivation in sports. Originally named "Échelle de Motivation dans les Sports" and later translated into English by Pelletier et al. (2013), this scale measures intrinsic, extrinsic, and motivation related to sports participation. However, it should be noted that the SMS does not encompass the most autonomous form of extrinsic motivation, known as integrated regulation, which is an important aspect of self-determination theory. The SMS uses a scoring system based on polytomous items with responses ranging from 1 (totally disagree) to 7 (totally agree). The reliability coefficients of the SMS ranged from 0.73 to 0.82, with an average of 0.77.

Perceived Stress Scale (PSS-10): The Perceived Stress Scale (PSS-10) [17] is a widely used self-reported questionnaire designed to assess psychological stress by gauging how individuals perceive and appraise stressful situations in their lives. The scale consists of 10 items, and respondents rate their agreement level on a Likert scale ranging from 0 (Never) to 4 (Very Often). The total PSS-10 score ranges from 0 to 40, with higher scores indicating higher levels of perceived stress. The scale is valuable for understanding the general level of stress individuals experience. It comprises two subscales, perceived helplessness, which measures feelings of lacking control over circumstances and emotions (items 1, 2, 3, 6, 9, 10), and Lack of Self-efficacy, which assesses an individual's perceived inability to handle problems (items 4, 5, 7, 8). (Cohen, at el., 1983).

Athlete Resilience Checklist (ARC): The Athlete Resilience Checklist (ARC) (Hamdani, et al., 2022) is a widely used instrument for assessing resilience in athletes. It comprises 27 items that measure three key factors of resilience in sports: self-determination, physical toughness, and emotional control and maturity. The scale demonstrates strong internal consistency, with a reliability coefficient of .80, indicating its stability and accuracy in measuring resilience. Additionally, its concurrent validity was established by comparing it to the indigenous Resilience Scale (Naz et al., 2010), with a correlation coefficient of .44, further confirming its effectiveness in assessing resilience among athletes.

Procedures

Following consent for the data collection from the appropriate university authorities, the participants were selected using the previously indicated sampling technique. Before the subjects could take part in the study, their informed permission was sought. They were told the purpose of the study and given the assurance that the information collected via the questionnaires would be kept strictly confidential and used exclusively for that purpose. They were also informed that they might withdraw from the study. After 300 forms distributed for the data, 50 were rejected because of incomplete or inconsistent forms and finally used data of 250 respondents for anaysis. After the data was collected, analysis was completed in SPSS.

Anonymity and informed consent are two ethical norms that demonstrate the study's commitment to participant rights and welfare. Easy sampling was utilized by researchers to gather data and effectively explore study objectives using the resources at hand.

Results

The results chapter presents the study's conclusions, emphasizing the connections between badminton players' resilience levels and motivation profiles. As the investigation reveals, athlete resilience is shaped by perceived stress, internal and extrinsic drive, and other factors.

Table 1: Descriptive Statistics of Athlete Resilience Scale (R_T) Perceived stress scale (PSS_T), and its factors (Perceived Helplessness, Lack of Self-efficacy)

		R_T	PSS_T	Perceived Helplessness	Lack of Self-efficacy
N	Valid	250	250	250	249
	Missing	0	0	0	0
Mean		85.88	31.99	19.04	12.95
Std. Deviation		16.95	5.37	4.25	2.86

Note: R_T= total of the Athlete Resilience Scale, PSS_T= total of the Perceived stress scale

The data from 250 Pakistani sports athletes in Table 1 provides useful insights into their mental health. The mean resilience score of 85.8880 on the Resilience Scale (R_T) shows that athletes are resilient. This indicates that they can handle sporting challenges. Athletes have moderate felt stress, scoring 31.9920 on the felt Stress Scale Total. The low standard deviation of 5.37508 suggests that athletes feel stress similarly. However, athletes also report modest perceived helplessness (mean = 19.0400) in stressful situations, indicating some control issues. On the positive side, the Lack of Self-efficacy sub-scale score of 12.9558 shows that athletes generally have a high level of perceived self-efficacy when dealing with stress, which can improve their sports performance and well-being. These findings illuminate the psychological aspects of Pakistani sports athletes and emphasize the need for support and resources to enhance their resilience and stress-coping mechanisms for optimal athletic performance and mental health.

Table 2: Descriptive Statistics of Sports Motivation Scale-6 (SMS_T), its subscales interpret and write paragraph A motivation, External Regulation, Introjected Regulation, Identified Regulation, Integrated Regulation, and Intrinsic Regulation

		SMS_T	Amotivation	External Regulation	Introjected Regulation	identified regulation	Integrated Regulation	Intrinsic Motivation
N	Valid	250	250	250	250	250	250	250
	Missing	0	0	0	0	0	0	0
Mean		104.70	16.2120	17.1000	17.6520	17.9720	17.8440	17.9240
Std. Dev		28.098	5.56588	5.57911	5.48994	5.69252	5.85395	5.85554

Note: SMS_T = total of Sports Motivation Scale-6

Table 2 shows the 250 sports players' motivation levels using the Sports Motivation Scale-6 (SMS_T) and its subscales. Motivation levels vary among athletes, as seen by the average motivation score of 104.7040 and the standard deviation of 28.09823. Subscale analysis shows

that athletes have low amotivation (16.2120), moderate external regulation (17.1000), and introjected regulation (17.6520). So, players are motivated by external and internal factors to play sports. On the other hand, identifiable regulation (mean = 17.9720) and integrated regulation (mean = 17.8440) motivate athletes through personal values, ambitions, and the integration of internal and external elements. The moderate intrinsic motivation (mean = 17.9240) shows that athletes enjoy physical activity for its purpose. Although athletes' motivational factors are complex, understanding them can help sports professionals tailor motivational strategies and create environments that foster intrinsic motivation, improving athletic performance and well-being.

Table 3: Pearson Correlation, on Resilience Scale (R_T) and a total of its factors, Perceived Stress Scale Total (PSS_T) and a total of its factors, and Sports Motivation Scale-6 (SMS_T)

	R_T	PSS_T	SMS_T	Amotivation	External Regulation	Introjected Regulation	Identified regulation	Integrated Regulation	Intrinsic Motivation	Perceived Helplessness	Lack of Self-efficacy
R_T		.189**	.345**	.014	.411**	.363**	.278**	.332**	.310**	.012	.343**
PSS_T			.470**	.381**	.391**	.300**	.289**	.505**	.454**	.848**	.618**
SMS_T				.617**	.850**	.847**	.853**	.919**	.861**	.330**	.396**
Amotivation					.425**	.288**	.307**	.574**	.461**	.333**	.221**
External Regulation						.696**	.662**	.735**	.691**	.257**	.353**
Introjected Regulation							.856**	.724**	.633**	.127*	.375**
Identified regulation								.719**	.675**	.163**	.303**
Integrated Regulation									.785**	.392**	.370**
Intrinsic Motivation										.351**	.335**
Perceived Helplessness											.108

Note. *p<0.05, **p<0.01, R_T= total of Athlete Resilience Scale, PSS_T= total of Perceived stress scale, SMS_T= total of sports motivation scale-6

The correlation analysis reveals several noteworthy findings regarding the relationships between resilience, perceived stress, and sports motivation among the 250 players. Firstly, there is a moderately positive correlation (r = 0.345**) between resilience (R_T) and overall sports motivation (SMS_T), indicating that athletes with higher levels of resilience tend to exhibit greater motivation to participate in sports. Additionally, the strong positive correlations between SMS_T and its sub-scales (amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation) suggest that athletes who are highly motivated in one aspect of sports are likely to display high motivation in other dimensions as well.

Regarding perceived stress, the perceived stress scale total (PSS_T) shows positive correlations with all SMS_T sub-scales, although with varying strengths. This suggests that as athletes experience higher levels of perceived stress, their motivational tendencies may differ depending on the specific aspect of sports. For example, higher perceived stress is strongly associated with a

sense of helplessness (Perceived Helplessness) among athletes when encountering challenging situations.

Furthermore, the positive correlations between PSS_T and specific SMS_T sub-scales, such as external regulation and introjected regulation, suggest that, in stressful circumstances, athletes may rely more on external rewards or internal pressures as motivators for their sports engagement.Regression analysis was conducted to examine the relationships between variables and assess how well they predict or explain the variation in the dependent variable.

Table 4: Regression analysis of components of the Sports Motivation Scale (SMS) and the Perceived Stress Scale (PSS)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	62.476	6.138		10.178	.000
	Perceived Helplessness	-.370	.249	-.093	-1.488	.138
	Lack of Self-efficacy	1.273	.362	.213	3.517	.001
	Amotivation	-.783	.212	-.257	-3.693	.000
	External Regulation	.947	.273	.312	3.464	.001
	Introjected Regulation	.482	.370	.156	1.303	.194
	identified regulation	-.679	.341	-.228	-1.994	.047
	Integrated Regulation	.588	.347	.202	1.695	.091
	Intrinsic Motivation	.197	.277	.068	.712	.477

Note: Dependent Variable: R_T

The multiple linear regression analysis was conducted to explore the relationships between athlete resilience (R_T) and various factors related to sports motivation and perceived stress. The results indicate that the overall model, including perceived helplessness, lack of self-efficacy, amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation, significantly predicts athlete resilience ($F = 14.934$, $p < .001$). Among the independent variables, lack of self-efficacy emerged as the strongest predictor of athlete resilience, showing a positive and significant standardized coefficient (Beta = .213, $p = .001$). This finding suggests that athletes who perceive themselves as having higher levels of self-efficacy when facing challenging situations in sports tend to exhibit higher resilience levels. Amotivation also had a negative and significant standardized coefficient (Beta = -.257, $p < .001$), indicating that athletes with lower motivation to engage in sports are associated with reduced resilience. Moreover, external regulation showed a positive and significant standardized coefficient (Beta = .312, $p = .001$), suggesting that athletes motivated by external rewards or pressures demonstrate higher resilience. Conversely, identified regulation exhibited a negative and significant standardized coefficient (Beta = -.228, $p = .047$), implying that athletes whose sports engagement is driven by personal values and goals may have lower resilience levels. The other variables, perceived helplessness, introjected regulation, integrated regulation, and intrinsic Motivation, did not significantly affect athlete resilience statistically.

Discussion

The present study investigated the relationships between motivation profiles and resilience levels in badminton players. The data analysis revealed several noteworthy insights and findings that

contribute to our understanding of the role of motivation in sports and its impact on athlete resilience.

Intrinsic motivation and its correlation with resilience levels in badminton players were among the study's main conclusions. A positive but non-significant link was found between athlete resilience and intrinsic motivation, which is defined as participating in sports for its own sake. This outcome supports earlier research by Vink et al. (2015), who discovered that intrinsic motivation enhances athletes' psychological health. According to Li et al. (2013), the non-significant link may be explained by additional variables that could affect resilience levels, such as coping mechanisms or outside stresses.

Conversely, a stronger correlation existed between athlete resilience and extrinsic motivation criteria. External regulation—motivation fueled by outside incentives or demands showed a strong positive association with resilience. This research implies that athletes who get their motivation from outside sources may be more resilient due to their ability to manage outside pressures and maintain their drive in the face of rocky situations. This finding is consistent with the research conducted by Sarkar and Fletcher (2014), which indicated that athletes with a high level of resilience were more likely to manage stress well.

Another noteworthy finding concerned recognized regulation, which suggests that motivation stems from individual values and objectives. According to the results, resilience levels and identified regulation were significantly and negatively correlated. The findings show that athletes who prioritize their ideals may be less resilient. This may be because they are under more pressure to live up to their expectations, which might wear them out and make them less resilient (Hurtubia, 2020). Researchers Miyazaki et al. (2015) and Jowett et al. (2017) linked psychological maladaptive, low need fulfillment, and low motivation in athletes, which supports this finding.

Amotivation, which is defined as a lack of desire to participate in athletics, also showed a strong inverse relationship with athlete resilience. According to studies by McLoughlin (2022) and Bali (2015), athletes under a lot of stress were likelier to show low motivation. This finding is in line with their findings. Decreased resilience may result from athletes who lack desire, finding it difficult to overcome obstacles, and their diminished ability to bounce back from failures.

The study also emphasized how important perceived stress is and how it may affect an athlete's resilience. The results demonstrated a strong positive relationship between resilience levels and stress, especially a lack of self-efficacy. This finding implies that athletes who believe they cannot manage challenges may be more stressed, impacting their resilience. The findings align with de Melo and Noce (2020) findings, who highlighted how stress and coping strategies influence athletes' resilience.

Conclusion

This investigation offers valuable insights into the psychological dynamics that influence resilience in badminton players. The results emphasize that athlete resilience was positively correlated with external regulation, a type of extrinsic motivation, while intrinsic motivation did not exhibit a substantial effect. It is intriguing that resilience was negatively correlated with identified regulation and amotivation, indicating that specific motivational profiles may reduce an athlete's ability to overcome adversity. Additionally, resilience levels were significantly influenced by perceived stress, particularly aspects related to self-efficacy. These findings emphasize the intricate relationship between psychological resilience, stress, and motivation in athletes. The implications for sports professionals, coaches, and mental health practitioners are evident: Promoting mental well-being and optimizing performance necessitates the development of

effective stress management strategies, enhancing self-efficacy, and nurturing intrinsic motivation in athletes. In order to inform more targeted and effective athlete development programs, future research should further investigate these relationships across diverse sports and cultural contexts.

Recommendations

- To address the limitations and broaden the scope of this research, the following recommendations are suggested:
- Conduct longitudinal studies to explore the temporal dynamics of motivation and resilience in sports.
- Extend research to include a more diverse and representative sample of athletes from various sports and cultural backgrounds.
- Utilize objective performance measures in addition to self-reported measures to enhance data validity.
- Implement tailored interventions to foster intrinsic motivation and self-efficacy in athletes.
- Provide stress management training and coping strategies to help athletes handle challenges and adversity effectively.
- Encourage coaches to strike a balance between external motivation and avoiding excessive self-imposed pressure to support athlete resilience.
- Investigate the role of social support and team dynamics in influencing athlete resilience.
- Explore potential gender differences in motivation profiles and resilience levels among athletes.
- Investigate the impact of coaching styles and team climate on athlete motivation and resilience.
- Collaborate with sports organizations and stakeholders to integrate mental health support programs into athletes' training and development.

References

- Bali, A. (2015). Psychological factors affecting sports performance. *International Journal of Physical Education, Sports and Health*, *1*(6), 92-95.
- Botte, B., Aarts, H., Bakkes, S. C. J., Veltkamp, R. C., Barbosa, S., Lampe, C., & Yatani, K. (2022). Motivation through gamification: A Self-Determination Theory perspective for the design of an adaptive reward system. In *CHI'22: Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*. Association for Computing Machinery.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.
- De Charms, R. (2013). *Personal causation: The internal affective determinants of behavior*. Routledge..
- de Melo, G. F., & Noce, F. (2020). Resilience of athletes: A systematic review based on a citation network analysis. *Cuadernos de Psicología del Deporte*, *20*(3), 26-40.
- Fletcher, D., & Arnold, R. (2016). Stress in sport: The role of the organizational environment. In *The organizational psychology of sport* (pp. 101-118). Routledge..
- Galli, N., & Gonzalez, S. P. (2015). Psychological resilience in sport: A review of the literature and implications for research and practice. *International Journal of Sport and Exercise Psychology*, *13*(3), 243-257.
- Gustafsson, H., Sagar, S. S., & Stenling, A. (2017). Fear of failure, psychological stress, and burnout among adolescent athletes competing in high level sport. *Scandinavian journal of medicine & science in sports*, *27*(12), 2091-2102.

- Hamdani, S. M. Z. H., Yinghai, L., Hamdani, S. D., & Haider, S. G. (2022). Assessing Opportunities & Constraints for Baseball Promotion in Pakistan. *Journal of Business and Social Review in Emerging Economies*, *8*(1), 139-148.
- Hurtubia, V. (2020). Cuando hablamos de resiliencia nos referimos a un proceso que produce cambios en los sistemas (Manciaux, 2003; Vanistendael y Lecomte, 2006; Rutter, 2012; Cyrulnik, 2016; Forés y Grané, 2008; Ungar, 2012). Desde esta perspectiva, Anna Masten (2014: 6) la define como:… la capacidad de un sistema de adaptarse, con éxito, frente. *La resiliencia ciudadana del siglo XXI: Una perspectiva integradora*
- Jowett, S., Adie, J. W., Bartholomew, K. J., Yang, S. X., Gustafsson, H., & Lopez-Jiménez, A. (2017). Motivational processes in the coach-athlete relationship: A multi-cultural self-determination approach. *Psychology of Sport and Exercise*, *32*, 143-152..
- Li, C., Wang, C. J., & Kee, Y. H. (2013). Burnout and its relations with basic psychological needs and motivation among athletes: A systematic review and meta-analysis. *Psychology of Sport and Exercise*, *14*(5), 692-700.
- Maddi, S. R., & Maddi, S. (2013). Personal hardiness as the basis for resilience. *Hardiness: Turning stressful circumstances into resilient growth*, 7-17.
- Madigan, D. J., Stoeber, J., & Passfield, L. (2016). Motivation mediates the perfectionism–burnout relationship: A three-wave longitudinal study with junior athletes. *Journal of sport and exercise psychology*, *38*(4), 341-354.
- Macnamara, B. N., Hambrick, D. Z., & Moreau, D. (2016). How important is deliberate practice? Reply to Ericsson (2016). *Perspectives on Psychological Science*, *11*(3), 355-358..
- McLoughlin, E., Arnold, R., Fletcher, D., Spahr, C. M., Slavich, G. M., & Moore, L. J. (2022). Assessing lifetime stressor exposure in sport performers: Associations with trait stress appraisals, health, well-being, and performance. *Psychology of sport and exercise*, *58*, 102078.
- Pelletier, L. G., Rocchi, M. A., Vallerand, R. J., Deci, E. L., & Ryan, R. M. (2013). Validation of the revised sport motivation scale (SMS-II). *Psychology of sport and exercise*, *14*(3), 329-341.
- Raza, M., Ling, H. Y., Hamdani, S. M. Z. H., & Haider, S. G. (2022). Socio-Cultural Interest and Motivational Barriers for Female Sports Participation in Pakistan: A Comparative Study of Universities and Colleges. *Sustainable Business and Society in Emerging Economies*, *4*(2), 547-560..
- Sarkar, M., & Fletcher, D. (2013). How should we measure psychological resilience in sport performers?. *Measurement in Physical Education and Exercise Science*, *17*(4), 264-280..
- Sarkar, M., & Fletcher, D. (2014). Psychological resilience in sport performers: a review of stressors and protective factors. *Journal of sports sciences*, *32*(15), 1419-1434..
- Trigueros, R., Aguilar-Parra, J. M., Álvarez, J. F., Cangas, A. J., & López-Liria, R. (2020). The effect of motivation on the resilience and anxiety of the athlete. *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*, *20*(77).
- Verardi, C. E. L., Nagamine, K. K., Domingos, N. A. M., De Marco, A., & Miyazaki, M. C. D. O. S. (2015). Burnout and pre-competition: A study of its occurrence in Brazilian soccer players. *Revista de psicología del deporte*, *24*(2), 259-264.
- Vink, K., Raudsepp, L., & Kais, K. (2015). Intrinsic motivation and individual deliberate practice are reciprocally related: Evidence from a longitudinal study of adolescent team sport athletes. *Psychology of sport and Exercise*, *16*, 1-6.
- Wehmeyer, M. L., Shogren, K. A., Little, T. D., & Lopez, S. J. (Eds.). (2017). *Development of self-determination through the life-course*. Springer..
- White, R. W. (1959). Motivation reconsidered: the concept of competence. *Psychological review*, *66*(5), 297.