

Research Article

Taekwondo Student-Athletes Resilience and Mental Toughness: Coping with Sports Failure

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ABSTRACT

National athletes are often celebrated for their victories, but the reality of sports failure is an integral part of their journey to success. This participatory action research explored how athletes process and learned from defeats and adversities. Twelve Taekwondo student-athletes, who train and compete in national games and Southeast Asian tournaments, participated in the study. Participants completed the Sports Mental Toughness Questionnaire (SMTQ; Sheard, Golby & Wersch, 2009) and underwent semi-structured interviews that utilized the principles of Motivational Interviewing (MI; Miller & Rollnick, 2013). The results of the SMTQ indicated a high level of mental toughness which the student-athletes attributed to their skill in emotion regulation and persistence under pressure. Thematic analysis of their experiences revealed the centrality of a strong sense of community, derived from the social support of coaches, teammates, and family members, in building resilience and nurturing mental toughness. Effective coping strategies identified by the student-athletes included goal setting, reframing setbacks, and positive self-talk, which helped maintain motivation. The actionable insight derived from this action research emphasizes the value of the MI principles in fostering continuous resilience-building among Taekwondo student-athlete participants.

Keywords: sports failure, resilience, Motivational Interviewing, action research

1. INTRODUCTION

"It's not whether you get knocked down; it's whether you get up".

- Vince Lombardi

Setbacks play a crucial role in fostering resilience, equipping individuals with the strength and adaptability needed to navigate life's challenges. Nowhere is this more evident than in sports, where repetitive training, perseverance through failure, and a commitment to improvement shape a resilient mindset that extends beyond the playing field (Wu et al., 2022). Athletes experience both triumphs and defeats, and both experiences cultivate coping skills that prove valuable in personal, academic, and professional settings. Moreover, the social support with teammates and coaches inherent in sports acts as a psychological buffer, mitigating stress and enhancing overall resilience (Masten et al., 2021).

Mental toughness is a defining trait in athletic success, enabling athletes to manage pressure, adversity, and stress while striving for excellence. It is closely tied to goal achievement, emotion regulation, and self-reflection, fostering confidence, control, positive thinking, and competitiveness—all of which contribute to enhanced performance (Soundara et al., 2022). Beyond athletic outcomes, psychological attributes such as grit and resilience empower student-athletes to recover from setbacks, cope with competitive demands, and maintain motivation in the face of challenges (Akbar et al., 2024; Mendizabal, 2024). A meta-analysis by Hsieh et al. (2022) further highlights the pivotal role of mental toughness in competitive sports, demonstrating its profound impact on performance and long-term success.

Taekwondo, a discipline that demands both physical skill and mental fortitude, provides a unique framework for developing resilience and mental toughness. The rigorous training, emphasis on perseverance, and exposure to high-stakes competition prepare student-athletes to cope with sports-related failures and setbacks. Losing a match or struggling with technical mastery can be discouraging, but Taekwondo sports instills a growth mindset—encouraging athletes to learn from mistakes, refine their strategies, and persist in the face of adversity. Beyond the physical and technical aspects, the sport fosters emotional regulation, stress management, and psychological endurance, all of which contribute to an athlete's ability to rebound from failure. By cultivating these traits, Taekwondo student-athletes not only improve their athletic performance but also build lifelong coping

mechanisms applicable in academic, personal, and professional domains.

While resilience and mental toughness are widely recognized as critical factors in athletic success, there remains a gap in research on how Taekwondo student-athletes specifically develop these psychological attributes in response to sports failure. Unlike team sports, where collective support may buffer the emotional impact of loss, Taekwondo is often an individual pursuit, placing greater psychological pressure on athletes to manage setbacks independently. Without proper guidance and support systems, repeated failures can lead to diminished motivation, burnout, and decreased self-efficacy. Despite the demanding nature of the sport, there is limited empirical research exploring targeted interventions or coping strategies that help Taekwondo student-athletes process failure in a constructive way. Addressing this gap is crucial for fostering a culture that not only values technical excellence but also prioritizes psychological resilience, ensuring that athletes develop the mental toughness needed to thrive both in competition and in life.

Research has consistently highlighted social support as a key factor in athletes' psychological well-being, not only in enhancing sports performance but also in fostering resilience and personal growth through open discussions about setbacks and challenges (Birrane, 2017; Katagami & Tsuchiya, 2016). In this context, Motivational Interviewing (MI) has emerged as an effective, evidence-based, and collaborative counseling approach that helps individuals reframe setbacks as opportunities for growth (Lewis, 2017; Rollnick et al., 2019). By fostering a supportive dialogue, MI encourages self-reflection, enabling athletes to explore their emotions, redefine failures, and develop a more adaptive mindset toward adversity. Moreover, MI plays a crucial role in helping athletes overcome resistance and ambivalence, strengthening their commitment to change and encouraging active engagement in goal setting and the behavioral adjustments necessary for performance improvement (Breckon et al., 2018; Hare et al., 2022). In sports psychology, MI is particularly valuable due to its emphasis on both relational and technical components, which enhance athlete readiness for change and facilitate action-oriented interventions. By improving communication between athletes and coaches, MI fosters a positive and collaborative approach to goal setting, self-efficacy, and performance enhancement (Mack, 2020; Mack et al., 2017). Given its effectiveness in promoting resilience and mental toughness, integrating MI into sports interventions could be instrumental in helping Taekwondo student-athletes navigate setbacks and maintain motivation in high-pressure competitive environments.

Understanding the experiences of Taekwondo student-athletes from their own perspectives is crucial in gaining deeper insights into how they navigate sports failure, build resilience, and develop mental toughness. By giving them a platform to share their personal journeys—their struggles, coping mechanisms, and lessons learned—this study seeks to highlight the psychological and emotional aspects of competitive sports that often go unspoken. Recognizing their voices not only enriches our understanding of the challenges they face but also informs strategies that can better support their growth, motivation, and long-term success in both sports and life.

This study explores the coping strategies employed by Taekwondo student-athletes in dealing with sports failure, focusing on how these experiences contribute to their resilience, mental toughness, and overall motivation. It examines their personal journeys in the sport, the challenges they face in training and competition, and the lessons learned from overcoming setbacks. Additionally, it investigates the role of coping mechanisms and support systems, such as coaches, teammates, and psychological interventions, in transforming failures into growth opportunities. Ultimately, this research aims to understand how these athletes sustain resilience and mental toughness, providing insights that may guide others in overcoming sports-related challenges.

2. MATERIALS AND METHODS

Research Design. This study employs a qualitative research approach to gain an in-depth understanding of Taekwondo student-athletes' experiences, perspectives, and motivations in coping with sports failure (Tenny et al., 2022). Additionally, it adopts a participatory action research (PAR) framework, which values experiential knowledge and emphasizes the co-creation of insights between researchers and participants (Cornish et al., 2023).

Participants. The participants of this study consisted of Taekwondo student-athletes from the three big educational institutions in the so-called university belt in Manila, all of whom have experienced significant sports failures, such as losses in major competitions or setbacks in training. A purposive sampling method was used to select individuals who met the criteria of being actively involved in the university's Taekwondo team and having encountered challenges that tested their resilience and mental toughness. A total of 12 participants were recruited, ensuring diverse perspectives on coping mechanisms and psychological endurance.

Data Collection. Participants completed the Sports Mental Toughness Questionnaire (SMTQ; Sheard, Golby & Wersch, 2009) followed by semi-structured interviews to provide flexibility in exploring participants' experiences while ensuring that key topics related to resilience, mental toughness, and coping strategies were covered. The interview guide was informed by principles

of Motivational Interviewing (MI; Miller & Rollnick, 2013) to encourage open and reflective discussions. Each interview lasted approximately 40 to 50 minutes and was recorded with the participants' consent for accuracy and transcription purposes.

Data Analysis. Thematic analysis was employed to identify, analyze, and report patterns and themes within the participants' responses (Jowsey et al., 2024). Given the exploratory nature of this study and the absence of predefined conceptions about the coping strategies used by student-athletes, an inductive thematic analysis approach was adopted. This allowed themes to emerge organically from the data, ensuring that the findings were grounded in the lived experiences of the participants rather than shaped by prior assumptions (Naeem et al., 2024). To facilitate the analysis, QDA Miner, a qualitative data analysis software, was utilized to assist in coding, organizing, and systematically interpreting the data (Silver & Lewins, 2024).

Ethical Considerations. This study adhered to ethical research principles, ensuring that all participants were treated with respect and that their rights and well-being were protected. As the research posed no more than minimal risk to participants, formal Institutional Ethics Review Board (IERB) approval was not sought. However, permission to conduct the study was obtained from the Taekwondo team coaches, and informed consent was secured from all student-athletes before participation. They were fully informed about the study's objectives, procedures, and voluntary nature. They were assured of their right to withdraw at any time without any consequences. A registered psychologist supervised the interviews to ensure the appropriate use of Motivational Interviewing strategies. Confidentiality and anonymity were maintained by removing personally identifiable information from the data and securely storing all research materials. The study followed ethical guidelines for qualitative research, ensuring that the narratives shared by the participants were handled with sensitivity and respect.

3. RESULTS AND DISCUSSION

The Taekwondo student-athletes demonstrated high levels of mental toughness, as reflected in their Sports Mental Toughness Questionnaire scores. They attributed their mental toughness to their ability to regulate emotions and their persistence in overcoming challenges. Based on their personal narratives, recalling positive experiences—such as moments of camaraderie with teammates and past competitive successes—served as a coping mechanism during difficult times. This was especially evident during the COVID-19 pandemic when they faced the challenges of training in isolation, receiving instructions solely through online meetings with coaches and teammates, and managing financial difficulties that impacted both their personal and family needs.

"It's the bonding really, and the friendship that is the fruit of being together in excitement, in uncertainties, in hardships. It helps to think that I am not the only one who's tired, who's pressured to get the medals, and who needs to stay attentive and achieving in our academics."

"There are many challenges like in communication between coach and player especially during the COVID pandemic, the training continues non-stop even if there is no coach beside you to guide your moves and you don't hear your other teammates shouting in practice, you just have to push yourself and train. The hardships make the medal more meaningful."

The participants defined failure based on their experiences of anxiety, particularly in situations where they felt underprepared due to insufficient practice, faced overwhelming expectations, or were dissatisfied with their own performance in a game. They also associated failure with moments of tension in communication with their coach and teammates, the physical toll of training—such as body aches and injuries—and a perceived loss of mental sharpness caused by fatigue and physical setbacks.

"I feel pressured when all I hear is: Go out there and win. Go for gold. It's pressure that I have to be the best. I pressure myself to win and in the end, I end up a loser, and with injury. I prepared for a long time, I pressured myself only to go home limping."

"I feel tense, anxious, there is tension in my head, in how I listen, how I talk, how I anticipate moves of opponents."

For these Taekwondo student-athletes, lapses in disciplined training, performance mistakes, and game losses were not merely setbacks but valuable experiences that contributed to their personal growth and motivation for improvement. They emphasized the importance of viewing mistakes and defeats as learning opportunities, which encouraged them to refine their efforts and strengthen core values such as discipline, respect, and teamwork.

"I turn my failures to motivational force. Challenges shape me and prepare me. I get to know where I lack and so I double my effort in training to perfect my forms."

"I get to reflect on my attitude. Win or lose, there should always be respect... towards the officials, our coach, my teammates, it's one of the

core values of Taekwondo, to show respect and commitment.”

The coping strategies shared by the participants encompassed both individual efforts and social support systems. On a personal level, they emphasized the importance of effective time management, cultivating self-compassion, and developing inner strength to navigate challenges.

“For me, I train regularly, ... on time in scheduled training. I train and I train again and again and again, to be better the next time.”

“I give myself time to accept what I must do. ... I give time for myself to cry, to feel the sadness of losing. Meditation helps me. ... I give myself time to relax. ... I tell myself I need to be inwardly strong (tibay ng loob).”

Alongside personal effort, the Taekwondo student-athletes highlighted the vital role of their support systems, which included their coaches, teammates, family, and sponsors. The guidance and instruction from their coaches, the camaraderie and encouragement from their teammates, the unwavering motivation from their families, and the monetary incentives from sponsors collectively strengthened their character and resilience, both in sports and in life.

“Our coaches and my teammates, they make me feel that mistakes and loses are part of the game, ... it’s part of life. My coach is like a parent, they give advice, they teach, they inspire. They ingrain it in my head that I can win even if the opponent looks strong, ... even if the opponent is a black belter and I am not yet. ... My teammates are super helpful especially when we just laugh out our mistakes... they cheer me up, they teach me what to do, they are my support system, my family and even my relatives. They all give me strength.”

Looking ahead to how they can further develop their mental toughness and resilience in the face of ongoing hardships and challenges, Taekwondo student-athletes emphasize the importance of mental and emotional strength, as well as social connections. They highlight perseverance, emotion regulation, and viewing failures as opportunities for growth and motivation to maintain discipline and train diligently. Most importantly, they recognize the value of open communication within the team as a crucial factor in fostering resilience and sustained performance.

“It’s an emotional battle, and you shouldn’t loose. It’s a matter of arriving in acceptance. I will accept it ... whether I win ... or I loose ... it’s okay. The struggle is real. These challenges that are on my face ... in my body ... I turn them into motivation.”

“It’s our bond as a team ... I lean on them. Being social ... being in a conversation, voicing out my thoughts, ... knowing I am a part of the team, ... connecting with my teammates, my coach, my family, it’s the way to make me feel my inner strength(tibay ng loob).”

“I tell myself ... and I also share this to newbies ... keep working in your training until you meet your goals – the dreams you aspire ... it’s really discipline.”

The coping dynamics of Taekwondo student-athletes, as revealed through their narratives, highlight a multifaceted approach to resilience-building. Figure 1 summarizes these key factors based on the frequency and depth of their discussions, as well as the aspects they emphasized most. Social support emerged as a dominant theme, with athletes frequently mentioning the encouragement, motivation, and guidance from coaches, teammates, and family. Mental and emotional strategies, such as perseverance, emotion regulation, and self-compassion, were also widely discussed, particularly in relation to overcoming setbacks and maintaining motivation. Additionally, many participants emphasized behavioral strategies, including disciplined training, time management, and balancing academic and athletic responsibilities, as essential to sustaining progress. While extrinsic factors such as rewards and recognition were mentioned less frequently, they still played a role in reinforcing resilience and long-term commitment. Collectively, these insights illustrate the interconnected nature of social, psychological, and practical elements in shaping the athletes' ability to cope with failure and grow in their sport. Each factor builds on another. When one is missing or lacking, resilience weakens.

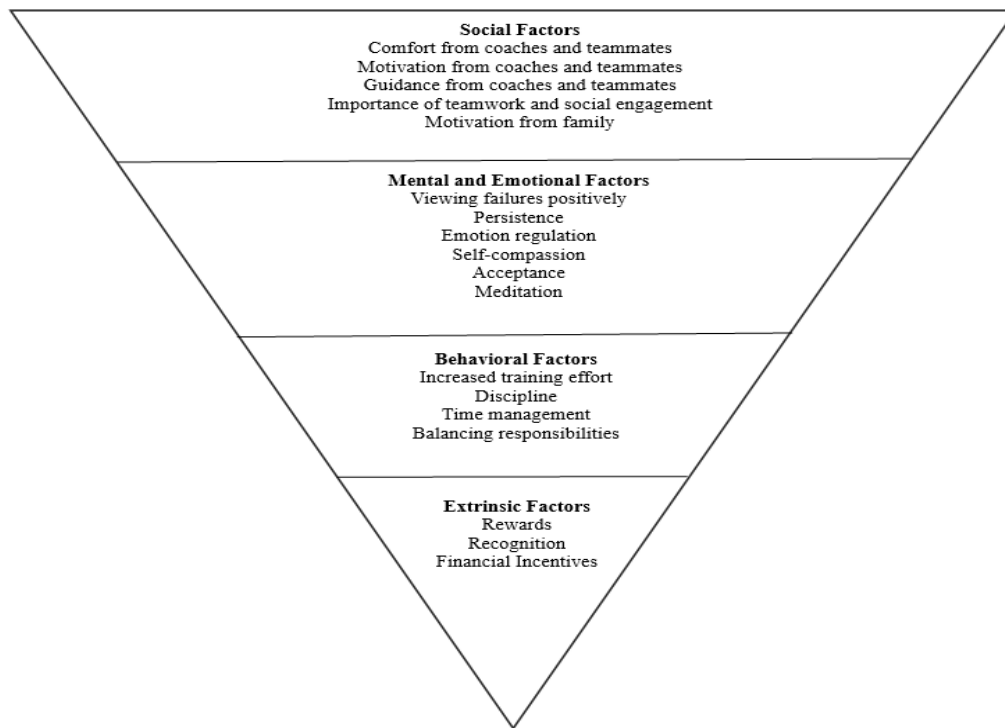


Figure 1. Key Factors in Building Resilience Among Taekwondo Student-Athletes

Building on these findings, the final part of the results reflects on the researchers' role in facilitating these narratives and the insights gained through the interview process. In conducting the semi-structured interviews, the researchers remained mindful of their influence on the discussion, recognizing that the depth and authenticity of the participants' stories were shaped not only by their experiences but also by how these were elicited. Applying the principles of motivational interviewing, particularly expressing empathy and supporting self-efficacy, proved instrumental in creating a space where athletes felt encouraged to articulate their struggles and growth.

A key aspect of the interview process was the application of motivational interviewing principles, which provided a supportive framework for eliciting rich, personal narratives from the participants. Among its five core principles, expressing empathy and supporting self-efficacy proved to be the most effective in encouraging athletes to share their experiences openly. By using phrases such as *"Help me understand..."* and *"Help me see you clearly..."*—delivered with genuine curiosity and warmth—the interviewers created a space where participants felt heard and valued. Nonverbal cues like smiles and sincere gestures of encouragement, along with affirming statements such as *"You inspire me by saying that,"* further reinforced the athletes' confidence in their own resilience. These approaches not only deepened the discussion but also empowered the participants to reflect on their coping mechanisms with a greater sense of self-awareness and affirmation, ultimately enriching the study's insights into resilience-building among Taekwondo student-athletes.

The findings of this study align with existing research on the negative psychological impact of sports failure, as well as the critical role of resilience and mental toughness in overcoming setbacks. Prior studies (Freimuth, 2018; Xu, 2023) have highlighted how failure in sports can lead to frustration, self-doubt, and heightened stress levels. Similarly, this study revealed that athletes experienced significant internal struggles, performance pressure, and external challenges—such as the disruptions caused by the pandemic—that intensified their difficulties. However, consistent with the work of Wu et al. (2022) and Masten et al. (2021), the athletes in this study demonstrated resilience by reframing failure as a source of personal growth, reinforcing the idea that adversity in sports can cultivate mental strength. Moreover, their coping strategies, which included both individual efforts and reliance on support systems, align with previous research (Murray et al., 2023; Moreno et al., 2019) emphasizing the vital role of social support in fostering resilience. Many participants underscored the significance of their teammates and coaches in maintaining motivation and pushing through challenges, further supporting the notion that strong social networks contribute to an athlete's ability to navigate and overcome adversity.

While the findings largely support existing research, this study distinguishes itself by focusing specifically on Filipino Taekwondo student-athletes and their unique experiences. One notable distinction is the strong emphasis on community in shaping

resilience. Despite Taekwondo being an individual sport, the athletes consistently highlighted the crucial role of coaches, teammates, and family in maintaining motivation and overcoming setbacks. Their narratives underscored how shared experiences within a supportive environment foster resilience, reinforcing the significance of social bonds in individual sports. Additionally, this study sheds light on the specific challenges these athletes faced during the pandemic, particularly the limitations of online training—an aspect not extensively explored in previous research. Financial constraints also emerged as a critical factor, adding complexity to how Filipino athletes navigate failure and sustain their commitment to the sport. Another key differentiation is the application of Motivational Interviewing (MI). While MI has been recognized as an effective tool in sports psychology (Rollnick et al., 2019), this study uniquely integrated MI principles to help athletes openly share their experiences.

However, the limitation of this study is the use of content analysis, which, while effective in identifying key factors in resilience-building, may not fully capture the depth of individual meaning-making processes. Future research could benefit from an interpretive phenomenological approach, which would provide a more nuanced understanding of how student-athletes construct meaning from sports failure and transform these experiences into a source of motivation.

4. CONCLUSION

While setbacks often lead to frustration and self-doubt, the findings highlight how athletes transform these challenges into opportunities for growth through personal determination, social support, and adaptive coping strategies. The strong sense of community—despite Taekwondo being an individual sport—proved to be a vital factor in sustaining motivation, with coaches, teammates, and family playing a significant role in fostering resilience. Additionally, integrating Motivational Interviewing principles demonstrated the effectiveness of reflective dialogue in reinforcing self-efficacy and reframing failure as a steppingstone to success.

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