



THE DEVELOPMENT OF A COMPREHENSIVE PERFORMANCE PROFILING MODEL FOR VIETNAMESE GOLFERS

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Abstract

This study aimed to analyze and determine performance profiling for Vietnamese golfer and its impact on their performance and development. The performance profile qualities were identified by three golf experts with over 17 years of competitive and coaching experience through semi-structured interviews. These experts confirmed using the performance profile model in training and competition after being informed by the researcher about the purpose and use of performance profiles. Participants were 30 golfers (66,67% males and 33,33% females) voluntarily participated, with 2 to 35 years of golf experience between them. The data collection process involved three stages: (1) technique introduction, (2) construct elicitation, and (3) self-assessment (Butler & Hardy, 1992; Gucciardi & Gordon, 2009). Statistical analysis was conducted using SPSS 26 to measure demographic variables. The study results identified three essential qualities in golf performance profiling: Psychological, Technical, and Physical each with four characteristics. Confidence was deemed the most critical psychological quality characteristic, followed by Concentration, Emotional Regulation, and Positive self-talk. Flexibility emerged as the most crucial Physical quality characteristic, while Control topped the technical quality. The findings support previous research on athletes' perceptions of performance profiling, emphasizing its potential to increase self-awareness, autonomy, and engagement. However, the study's limitations included a subjective evaluation by golfers, potential response bias, and the response from multiple levels of golfers. Additional research is required to validate the golf player profiles across diverse populations, encompass coach evaluations, and explore alternative assessment methods. Nevertheless, this study supplements the existing literature and offers practical insights for coaches and athletes to optimize performance and training practices.

Keywords: Golf, Performance profiling, Psychological

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Introduction

The development of high-performance sports is the resonance of countless components. In other words, athletes need more help from indirect and direct factors than having superior physical strength or rich competitive experience to achieve the desired results (Subotnik, Olszewski-Kubilius, & Worrell, 2021). In the realm of sporting success, psychologists place a particular emphasis on the significance of psychological factors among the many contributors (Echemendia, Webbe, Merritt, & González, 2019). The Performance Profile (PP) is a widely used intervention for analyzing and improving mental performance across various characteristics (Butler, & Hardy, 1992; Gucciardi, & Gordon, 2009).

Performance profiling is a proactive approach in sports psychology that can help athletes and teams improve their psychological factors, such as motivation and cohesion, leading to better performance and success. By utilizing the Performance Profile, sports psychologists can gain invaluable insights into an athlete's psychological strengths and weaknesses to tailor personalized interventions that enhance their mental game. Most of the literature on performance profiling is based on the original method developed by and Butler (1997); Butler and Hardy (1992). However, over the years, some adaptations have been created. The revised method by Gucciardi and Gordon (2009) is the most extensive and recent adaptation that has been made.

The performance profile technique is a theory-driven technique employed by sports psychology practitioners to assist athletes in evaluating their performance. It helps identify areas of excellence and those that may need improvement. Performance Profile is conceptually rooted within *personal construct theory* (PCT, (Kelly, 1955), which highlights the importance of recognizing and celebrating the uniqueness of every individual's perspective on themselves and their world. This technique provides an excellent opportunity to help athletes explore their perspectives on events and their methods of deriving meaning from their athletic performance. In addition, it is essential to note that performance profiling is rooted in *cognitive evaluation theory* (CET (Deci, & Ryan, 1985)). CET highlights those social and environmental factors, such as feedback, coach behavior towards athletes, and competition/cooperation, can reinforce an individual's sense of autonomy, competence, and relatedness. This can ultimately lead to higher levels of intrinsic motivation (Weston, Greenlees, & Thelwell, 2013). According to the CET theory, the performance profile helps athletes become more self-motivated by involving them in analyzing their performance and subsequent development.

Optimizing athletic performance requires a thorough understanding of the different factors that can affect it, such as the nature of the sport, the competition format, the location, timing, and equipment used (Furrer, Hawley, & Handschin, 2023). It is worth considering the potential for varied psychological states (i.e., emotion) and performance outcomes during a golf competition,



which can span up to five hours (Lundkvist, Gustafsson, Björklund, Davis, & Ivarsson, 2021). The outcomes may be influenced by an individual's self-perceived control at different stages of play and their ability to manage distractions while maintaining focus. Golfers may need to master the psychological factors that can make or break their performance. Without this skill, they are unlikely to reach their full potential. In addition, embracing unfavorable feelings like annoyance and frustration, staying in the current moment, and concentrating on pertinent task cues are effective methods for enhancing performance (Lundkvist, Gustafsson, Björklund, Davis, & Ivarsson, 2021). Golf is an individual sport that may require specialized psychological training. Ash Brook, Gillham, & Barba, (2018) suggested a personalized training program was proven effective, as almost half of the performance and perception metrics showed improvement from the initial measurements. At the same time, nearly 80% of mental skills demonstrated enhancement. In addition, depending on the golfer's level, their ability to control emotions, respond to adverse situations, and concentrate will vary. Lundkvist, Gustafsson, Björklund, Davis, & Ivarsson, 2021 and Kemarat, Theanthong, & Yeemin, (2021) reported that more experienced golfers exhibit excellent proficiency in handling their reactions to poor performance on specific holes. They may outperform others when practicing psychological skills training. Overall, understanding the psychological qualities and characteristics associated with peak performance in golf can provide valuable insights for athletes seeking to improve their game.

By understanding the psychological characteristics of professional golfers and their relation to golf performance, athletes and coaches can design targeted interventions that enhance mental toughness, focus, and overall performance on the golf course. As such, the growth of a comprehensive performance profiling model for golfers becomes crucial (Cox, 2022). This model will consider the physical and technical aspects of the game and the psychological factors that significantly impact a golfer's performance.

Research Objectives

This study aimed to analyze and determine performance profiling for Vietnamese golfer and its impact on their performance and development. This profile is intended for use by coaches, trainers, and instructors for analysis to offer improved guidance and support. By providing insights into the capabilities of Vietnamese golfers, the profile seeks to enable them to achieve their maximum potential in golf. Additionally, the findings of this study may contribute to the creation of training programs tailored specifically for professional and amateur golfers, aiming to support them in achieving their utmost athletic capabilities. Golf performance profiles will be evaluated from before the assessment to after in the following study, and further advantages of the modified performance profile intervention will be investigated.



The study aimed to investigate and develop the revised performance profile developed by Gucciardi and Gordon (2009) for golfers in Vietnam by addressing the following questions:

1. What particular characteristics or qualities were displayed by Vietnamese golfers?
2. How did each golfer evaluate their performance based on these characteristics or qualities?

Literature Review

Performance profiling techniques have gained significant prominence within sports psychology (Evans, & Tuttle, 2015). These methodologies, including the performance profile technique, enhance psychological outcomes for athletes and teams, focusing on motivation and team cohesion (Jones, 1993). The performance profile technique involves a collaborative effort between coaches and athletes to identify individual strengths and weaknesses (Bird, Castillo, & Luzzetti, 2021). Subsequently, effective strategies are devised to optimize athletic performance. Furthermore, this approach facilitates ongoing progress tracking and allows for necessary adjustments. Originating in 1992 through the work of Butler and Hardy, the performance profiling technique has evolved (Butterworth, O'Donoghue, & Cropley, 2013).

Performance profiling, a pivotal tool in sports psychology, provides athletes valuable insights into their strengths and weaknesses (Bird et al., 2021). Employing various assessment tools and techniques, performance profiling examines an athlete's psychological, emotional, and physical attributes (Koopmann, Faber, Baker, & Schorer, 2020). This process enables athletes to optimize their training strategies and achieve peak performance. Developed within the field of sport psychology, performance profiling aims to enhance psychological outcomes for individual athletes and teams (Bird et al., 2021).

Performance profiling offers a valuable tool for customizing and targeting mental skills training. By pinpointing areas needing improvement, athletes collaborate with sports psychologists to create tailored strategies for enhancing resilience, stress management, and concentration. This personalized approach can strengthen performance and empower athletes to overcome mental obstacles that might otherwise impede progress (Greenspan, & Feltz, 2024). Additionally, performance profiling cultivates self-awareness and intrinsic motivation (Bird et al., 2021). Moreover, performance profiling is valuable for monitoring and evaluating athletic performance. By consistently assessing an athlete's psychological and emotional well-being, coaches and sports psychologists can track progress, discern patterns, and refine training regimens. This proactive methodology aids athletes in sustaining peak performance levels while mitigating the risk of burnout or mental fatigue (Stamatis, Grandjean, Morgan, Padgett, Cowden, & Koutakis, 2020).

In summary, performance profiling is a potent instrument within sports psychology, affording athletes a profound comprehension of their psychological strengths and vulnerabilities. With



this insight, athletes can meticulously devise targeted strategies to enhance their mental acuity, optimize training regimens, and elevate their overall performance on the field or court, especially for golfers (Evans, & Tuttle, 2015; Taylor, 1995).

Personal Construct Theory (PCT) is a psychological framework that centers on how individuals construct and interpret reality (Gucciardi, & Gordon, 2009). While PCT finds application across various contexts, including sports such as golf, its relevance lies in understanding golfers' self-concept and performance perspectives (Kelly, 1955). In a specific study, researchers leveraged PCT to create performance profiles that captured golfers' unique constructions and beliefs (Thomas, & Over, 1994). These profiles shed light on critical factors influencing skilled performance in golf, encompassing mental preparation, concentration levels, emotional states, and unwavering commitment to the sport (Bois, Sarrazin, Southon, & Boiché, 2009). Notably, skilled golfers demonstrated heightened mental preparedness, superior concentration, reduced negative emotions and cognitions, improved psychomotor automaticity, and a steadfast dedication to golf, distinguishing them from lower handicap players (Thomas, & Over, 1994).

Applying Personal Construct Theory (PCT) within the context of golf has yielded valuable insights into various facets of skilled performance. These findings underscore the potential advantages of integrating PCT into golf training and performance enhancement programs (Bois, Sarrazin, Southon, & Boiché, 2009). Furthermore, leveraging performance profiles rooted in PCT allows for a customized approach tailored to each golfer's unique constructions and perspectives. Beyond golf, PCT's insights have transcended the sport, proving valuable in other athletic domains (Bird et al., 2021). For instance, performance profiling - guided by PCT - serves as a theory-driven, client-led assessment method in sports psychology. It unveils critical factors influencing an athlete's performance, spanning physical, psychological, technical, and tactical elements. Notably, performance profiling influenced by PCT contributes to essential psychological constructs, including self-awareness and intrinsic motivation (Gucciardi, & Gordon, 2009).

Using Personal Construct Theory (PCT) within the golf context has yielded valuable insights across various dimensions of skilled performance. These insights can inform training and performance enhancement programs while facilitating the development of personalized approaches tailored to individual athletes (Bois, Sarrazin, Southon, & Boiché, 2009). The existing literature underscores Personal Construct Theory as a valuable framework for comprehending and enhancing sports performance, particularly in golf. Researchers and practitioners in sports psychology have expressed keen interest in applying Personal Construct Theory to explore how individuals perceive and interpret their golf experiences, thereby providing valuable insights into performance, motivation, and overall well-being (Thomas, & Over, 1994).



Cognitive Evaluation Theory (CET) is a framework that investigates the psychological factors and processes influencing golf performance (Beauchamp, Halliwell, Fournier, & Koestner, 1996). Performance profiling, rooted in CET, has yielded valuable insights into the cognitive mechanisms underpinning successful play on the golf course (Bird et al., 2021). Research in this domain has underscored the significance of attention, decision-making, and problem-solving skills within golf; by comprehending how these cognitive processes impact performance, coaches and athletes can design targeted training programs to enhance performance during golf play (Walton, Keegan, Martin, & Hallock, 2018).

Research has consistently underscored the pivotal role of self-efficacy, motivation, and confidence in golf performance (Beattie, Lief, Adamoulas, & Oliver, 2011). Within the cognitive evaluation theory (CET) framework, individuals' beliefs regarding their capabilities and the intrinsic value they assign to a specific task significantly impact their overall performance (Thomas, & Fogarty, 1997). A comprehensive understanding of these psychological factors empowers golfers to refine their mental approach to the game and cultivate resilience when facing challenges (Boardley, Jackson, & Simmons, 2015). Moreover, integrating cognitive evaluation theory (CET) into performance profiling offers valuable insights for identifying individual strengths and weaknesses, which informs the development of personalized and practical coaching strategies. By tailoring interventions to address specific cognitive factors, coaches can optimize the potential for performance improvement among golfers (Bird et al., 2021; Butterworth, et al., 2013).

As sports psychology advances, incorporating cognitive evaluation theory (CET) into performance profiling presents promising avenues for bolstering golfers' mental acuity. Ultimately, this integration aims to optimize their performance on the golf course (Chadha, Turner, & Slater, 2019).

Hence, this study aimed to investigate and develop a customized Performance Profile tailored to the unique requirements of Vietnamese golfers. This profile is an analytical tool designed for use by coaches, trainers, and instructors to provide enhanced guidance and support. By offering insights into the capabilities of Vietnamese golfers, the profile aims to unlock their full potential on the golf course. Furthermore, the study's findings may inform the creation of targeted training programs, benefiting both professional and amateur golfers in their pursuit of peak athletic performance. The evaluation of golf performance profiles, from pre-assessment to post-assessment, will shed light on the additional advantages of the modified performance profile intervention.

Methods

Participants



Thirty Vietnamese golfers (male = 20, female = 10) participated in the study using a non-probability sampling approach. These golfers (age range = 19 - 60 years; mean age = 24.50; S.D. = 7, 91) had played golf for 4, 10 years (S.D. = 5, 95) with golf experience ranging from 2 to 35 years.

Data analysis

The qualitative responses were coded and inputted into the computer (Microsoft Word) so as not to damage the original data. The Thematic Coding method was used to encode qualitative data. Thematic Coding is a form of qualitative analysis that involves recording or identifying passages of text or images that are linked by a common theme or idea, allowing you to index the text into categories and therefore establish a “framework of thematic ideas about it” (Gibbs, 2007). The collected data were analyzed by adopting an Inductive Content Analysis method.

Descriptive statistics were assessed using SPSS 26, yielding valuable information about the age, gender, and golf experience of the participants. The validity of the Performance Profile was established by employing bivariate correlations to examine the relationship between the rank of importance assigned to each quality, the overall importance rating, and the self-assessment scores. This analysis allowed for a comprehensive evaluation of the relationships between these variables, thus providing a better understanding of the Performance Profile's efficacy. By exploring the correlations among these factors, it was possible to ascertain whether the Performance Profile is reliable for evaluating an individual's performance. These findings enhanced researchers' understanding of the study group and facilitated drawing meaningful conclusions from the data.

Procedure

Expert interviews are a commonly utilized qualitative research method to acquire information or investigate an area of interest. The combination of problem-centered interviews proved to be a practical approach for exploring the hidden aspects of expert knowledge and incorporating professional expertise and personal experiences to understand (Döringer, 2021). The researcher scheduled individual appointments with the experts at their working golf facilities (Ky Hoa Golf Practice Range, Tan Son Nhat Golf Practice Range, and Him Lam Golf Practice Range). The interviews were conducted as structured discussions pertinent to the research area of interest. After introducing the Performance Profile intervention, individual qualitative expert interviews were conducted to gather their insights on characteristics or qualities influencing golfers' performance. Three of the interviewed experts were golf coaches with over 17 years of competitive and coaching experience. They are also highly knowledgeable individuals who have worked with the Vietnam national golf team or achieved outstanding results in domestic and international golf tournaments. The interviews with the expert golf coaches were conducted face-to-face length one hour using a semi-structured interview guide, allowing for open-ended questions and in-depth discussions.



The qualitative data were analyzed through a discussion among three researchers. In other words, the performance profile qualities were recognized as the result data only after the confirmation by all researchers. After three experts confirmed that the compiled performance profiles were deemed appropriate, the performance profile worksheet was distributed, and golfers (collected through non-probability sampling) were guided through the example on the first page. Golfers completed the various sections of the works sheet in order of stages of the Performance Profiling process, including (1) technique introduction, (2) construct elicitation, and (3) self-assessment (Butler & Hardy, 1992; Gucciardi, & Gordon, 2009).

The qualities identified by experts are listed in the first column of the performance profile worksheet (see Table 1). In the second stage, golfers interpret each essential characteristic according to their understanding, which is recorded in the second column under the guidance of practitioners. They are then asked to identify qualities that contrast with each of the critical qualities (third column) and provide explanations for these contrasting qualities based on their interpretations (fourth column). The practitioner guides golfers to prioritize the created qualities based on their significance and engage in a repetitive process of assessing a list. They then indicate the most crucial quality for a professional golfer by assigning it as "1" in the fifth column, followed by determining the second most important quality and assigning it a rank of "2". This sequence is repeated until all attributes have been ranked. To complete the second stage, golfers were asked to rate the overall importance on a scale of 1 to 10 (with "1" being "not important at all" and "10" being "of crucial importance") in the sixth column.

In the last stage, golfers assessed their current perception of their skill level in each grade using a 10-point Likert-type scale that ranged from 1 (opposite quality) to 10 (key quality), with higher scores indicating greater possession of the key quality. They shaded the corresponding area on the performance profile based on their self-assessment, visually representing the athletes' perceived strengths and weaknesses (see Figure 1).



PERFORMANCE PROFILE

Name: Thuy Van Age: 20 Gender: Female
Male/Female
Golf Experience: 15 (Year) Day: 29/3/2024 Thuya

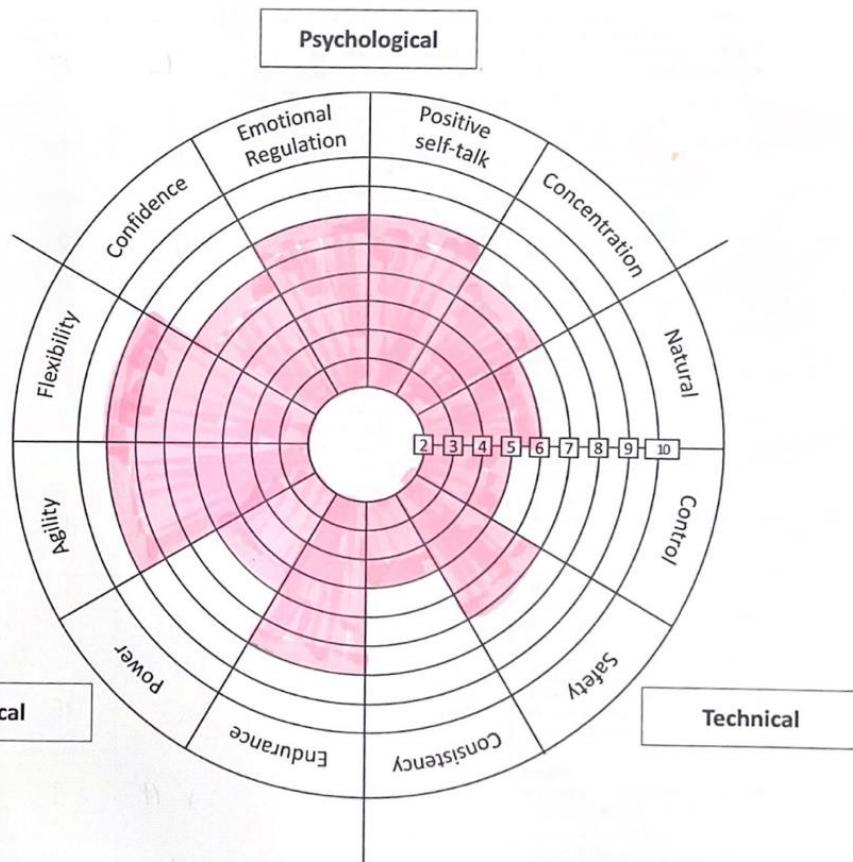


Figure 1 Example of a golf performance profile

Results

Three experts discussed the intricacies of golf performance and identified three key characteristics that significantly impact a golfer's success through an interview. For each characteristic, they outlined four specific qualities critical to achieving peak performance on the course (see Figure 1 for an example of a golf performance profile). The discussion revealed the complex interplay between skill, technique, and mindset required to excel in this challenging sport. During the research study, participants underwent an assessment to identify their strengths and weaknesses in golf, along with any specific demands or requirements they had. The information was collected and analyzed to create personalized performance profiles for each individual, which were then used to develop tailored strategies and improvement plans meeting the specific needs of each golfer.



Table 1 Example of an advanced complete golf performance profile

Key Quality (Psychological, Technical, Physical)	What does this key quality or characteristic mean to you?	Opposite Quality	What does this opposite quality or characteristic mean to you?	Rank Order of Importance (from 1 to 12)	General Importance (from 1 to 10)	Current Self- Assessment (from 1 to 10)
<i>Confidence</i>	Believe in myself to achieve goals	<i>Self-doubt</i>	Little or no belief in my own abilities.	1	8	9
<i>Emotional Regulation</i>	Controlling my emotions in any situation	<i>Emotional Instability</i>	Struggling to control emotions in various situations	5	8	9
<i>Positive self-talk</i>	Engaging in positive conversation with myself, whether talking aloud or in my mind	<i>Negative self-talk</i>	Engaging in conversation with myself using negative, critical, or angry words	6	7	7
<i>Concentration</i>	Maintaining focus on a specific task without being disrupted or affected by other events	<i>Distraction</i>	Being interrupted or disrupted by external factors such as people, noise, etc., while performing a task	2	10	9
<i>Natural</i>	Keeping motions out of imposition and follow the body's natural mechanism	<i>Unnatural</i>	Executing techniques unsuitable for my physical condition	7	7	7
<i>Control</i>	Adjusting techniques to align most accurately with my own preferences and desires	<i>Uncontrol</i>	Unable to adjust techniques according to my own preferences	3	10	7
<i>Safety</i>	Capable of minimizing injuries while performing techniques	<i>Unsafety</i>	Performing excessively difficult techniques, unsuitable for the body, leading to injury	10	8	6
<i>Consistency</i>	Body motions are almost the same at each repetition	<i>Inconsistency</i>	Performing techniques without adhering to a specific pattern, resulting in varying outcomes with each attempt	9	10	7
<i>Endurance</i>	Keeping muscles, nervous biomotor ability during a long time	<i>Fatigue</i>	The quick onset of fatigue during physical activity	12	5	9
<i>Power</i>	Exerting force to impact an object, performing heavy-duty tasks in the shortest amount of time	<i>Lack of strength</i>	Muscled with low power capacity	8	10	6
<i>Agility</i>	Quickly change movement, directions while keeping stability	<i>Slow</i>	Rhythm, execution speed of movements slower than usual	11	5	8
<i>Flexibility</i>	Reach range of motion, easily to change or modify in different motion	<i>Rigidity</i>	Limited muscle and joint flexibility	4	9	9

The group of Psychological characteristics is ranked the highest, with *Confidence* and *Concentration* as the first and second in importance (refer to Table 2). The Technical group



follows, with *Control* in third place and *Consistency* in fourth overall. On the other hand, Physical factors are not prioritized highly, particularly *Endurance* (ranked 11th) and *Agility* (ranked 12th). Likewise, Psychological and Technical characteristics receive higher scores than Physical characteristics. *Consistency* has the highest average score (8.79), followed by *Confidence*, *Concentration*, and *Control* with decreasing average scores.

Table 2 Ranking and average scores of qualities on Rank order of importance, General importance, and Self-assessment

Qualities	Rank order of Importance (from 1 to 12)		General importance (from 1 to 10)		Current self-assesment (from 1 to 10)	
	Rank	Average	Rank	Average	Rank	Average
<i>Confidence</i>	1	3,90	11	8,90	5	7,00
<i>Emotional Regulation</i>	5	5,50	6	8,13	8	6,77
<i>Positive self-talk</i>	10	7,97	2	7,37	10	6,47
<i>Concentration</i>	2	4,57	10	8,87	1	7,47
<i>Natural</i>	8	7,03	4	7,80	9	6,60
<i>Control</i>	3	5,23	9	8,53	11	5,77
<i>Safety</i>	9	7,77	5	7,93	7	6,90
<i>Consistency</i>	4	5,27	12	8,97	12	5,60
<i>Endurance</i>	11	8,33	3	7,73	2	7,27
<i>Power</i>	7	6,73	8	8,50	3	7,13
<i>Agility</i>	12	9,17	1	7,03	6	6,97
<i>Flexibility</i>	6	6,53	7	8,17	4	7,07

The study found that the correlation between the rank and general importance rating was as anticipated, showing a strong negative relationship ($r_{mean} = -0.91$, $p<0.01$). This implies that qualities with higher rankings also received higher ratings, suggesting that the ranking system utilized in the study effectively identified essential qualities. However, the correlations between self-assessment and the rank of importance ($r_{mean} = 0.19$, $p>0.05$) and the general importance rating ($r_{mean} = -0.18$, $p>0.05$) were found to be weak. This suggests that individuals may not accurately assess the importance of certain qualities, and other factors may influence their self-assessment.

Discussion

This study investigated three key performance areas – Psychological, Technical, and Physical (each of these qualities encompasses four distinct characteristics) – and identified them



through the research question: "What particular characteristics or qualities were displayed by Vietnamese golfers?" Analyzing these areas, a comprehensive Performance Profile was explicitly developed for Vietnamese golfers. This profile is intended to be a valuable tool for coaches, trainers, and instructors. By utilizing the profile, they can gain deeper insights into the strengths and weaknesses of Vietnamese golfers, allowing them to provide more practical guidance and support. Ultimately, the Performance Profile aims to empower Vietnamese golfers to reach their full potential in the sport.

This study demonstrated the effectiveness of the implemented ranking system in identifying essential golfer qualities. A strong negative correlation (r_{mean}) between assigned rank and general importance rating ($p < 0.01$) indicates that higher-ranked qualities were judged more important. However, a weak correlation between self-assessment and rank/general importance ($p > 0.05$) suggests that regardless of the high or low rank/general importance of qualities, golfers may assess their abilities independently of rank/general importance. These findings highlight the need for further research into the factors influencing golfers' self-perceptions and evaluations of performance characteristics. Understanding these dynamics can significantly impact developing golf performance improvement and training strategies.

Within the psychological domain, the study identified *Confidence* as the most crucial characteristic for Vietnamese golfers. Defined as "belief in oneself to achieve goals," confidence embodies the self-assured demeanor essential for success. Interestingly, the research also revealed that *Concentration* ranked highest in directly impacting current self-assessment golf performance, placing it at number one. However, the study ultimately concluded that both *Confidence* (ranked fifth) and *Concentration* (ranked first) are fundamental for Vietnamese golfers to achieve their desired performance level in terms of the psychological aspect. This study aligns with existing research by Jo, Lim, & Yang (2016) highlighting confidence and concentration as critical Psychological factors influencing Vietnamese golfers' performance. Like the findings of Kim (2016) and Bois, Sarrazin, Southon, & Boiché (2009) concentration emerged as the most direct influence on overall golf performance, while confidence was identified as a fundamental characteristic of success. These findings emphasize the importance of developing both aspects to optimize the psychological foundation for performance in Vietnamese golfers (Jo, Lim, & Yang, 2016). Recognizing the interplay between confidence and concentration and implementing strategies to improve them could be crucial for golfers seeking to elevate their performance (Thomas, & Fogarty, 1997).

The results identified *Control* as Vietnamese golfers' most crucial technical characteristic. Defined as "adjusting techniques to align most accurately with personal preferences and desires," *Control* supports the previous research by allowing golfers to tailor their swing for optimal



performance (Choi, Joo, Oh, & Mun, 2014). Interestingly, *Safety*, defined as "minimizing injuries while performing techniques," ranked highest in directly impacting current self-assessment golf performance in the technical domain, and the result aligned with the finding of Meira and Brumitt (2010). This suggests a potential prioritization of injury prevention over precise technique development among Vietnamese golfers. However, Sherman and Finch (2000) and Evans and Tuttle (2015) suggested that prioritizing safety may hinder skill development. Focusing excessively on injury avoidance could limit the exploration of advanced techniques that enhance performance (Ehlert, 2020). Additionally, overemphasizing safety may impede muscle memory and adaptability to varying course conditions (Müller, Gabbett, & McNeil, 2023). While safety remains paramount, critics argue it should not overshadow technical mastery (Lindsay, Mantrop, & Vandervoort, 2008). Therefore, balancing control and safety is crucial for Vietnamese golfers to optimize their on-course performance.

The findings identified *Flexibility* as Vietnamese golfers' most crucial Physical characteristic. Defined as "the ability to achieve a wide range of motion and easily adapt to different movements," *Flexibility* allows unrestricted muscle and joint movement, a key component of a successful golf swing, and supports many previous studies (Lindsay, et al., 2008; Wells, Elmi, & Thomas, 2009). Interestingly, *Endurance*, is defined as "the ability to sustain muscular and nervous system function during extended periods," ranked highest in golfers' self - reported impact on their current performance within the physical domain (Sheehan, Bower, & Watsford, 2022). The results suggest that Vietnamese golfers prioritize stamina over maximizing range of motion. However, it is essential to acknowledge the value of a balanced approach. While flexibility is crucial, strength and power are equally important for generating distance and clubhead speed in golf (Sheehan, et al., 2022). As golf requires explosive movements, sufficient strength and power are necessary to achieve optimal distance and precision. Therefore, golfers should balance flexibility, strength, and power to maximize their on-course performance (Sheehan, et al., 2022).

Conclusion

In conclusion, this study offered the first comprehensive and exploratory analysis of Vietnamese golfers' perceptions regarding the impact of performance profiling. This profile identifies crucial Psychological (*Confidence* and *Concentration*), Technical (*Control*), and Physical (*Flexibility*) characteristics. This profile allows coaches to optimize player development across these key areas. Interestingly, the research suggests a potential prioritization of safety over precise technique development and stamina over maximizing range of motion among Vietnamese golfers. This study emphasizes the significance of a comprehensive performance profiling model in understanding and enhancing the performance of Vietnamese golfers. This



model can serve as a valuable tool for personalized training programs and performance improvement strategies by identifying key Psychological, Physical, and technical factors. These findings contribute to the increasing wealth of literature and information available for coaches, trainers, and sports psychologists who work with Vietnamese golfers.

Moving forward, it will be essential to conduct experimental studies or further longitudinal studies to validate the effectiveness of the proposed performance profiling model. Additionally, exploring the potential integration of technology, such as wearable devices and data analytics, into the model could further enhance its applicability and precision. Overall, this research establishes a foundation for developing customized training and coaching programs to maximize the potential of Vietnamese golfers and promote the advancement of golf in Vietnam.

While the present study makes a valuable contribution to the field, it also has some limitations. First, the data collected for this study were subjectively evaluated by golfers, without using objective evaluation methods such as quality tests or coach evaluations. Second, bias in the responses is possible due to a non-probability sampling approach. Demographic characteristics such as gender, age, and years of experience in golf varied, making it inappropriate to make broad generalizations about the findings for other athlete demographics. Finally, the study used the results of expert interviews on performance impact qualities for golfers at multiple levels of self-assessment. This limits the presentation of ideal qualities that impact the performance of specific golfer groups. Consequently, future studies should focus on more specific subject groups and investigate profiling in combination with other assessment methods. Future studies should aim to create a research framework that integrates several assessment techniques, such as empirical analysis, comparison of different outcomes identified in existing literature, and creating more valid and reliable tools for assessing the benefits and impact of performance profiles.

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Received: 2024, May 2

Revised: 2024, June 26

Accept: 2024, September 15

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