

Construction of core literacy index system for tennis majors in sports colleges and universities in China

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Abstract: The study aimed to index core literacies of tennis major students in sports colleges and universities in China using the quantitative methods of research. With perspectives from teacher-respondents and tennis major students, the researcher through review of literature and studies identified three (3) categories of literacies of tennis majors inclusive of healthy behavior, sport ability and sport morality. The indicators of these literacies were assessed by both groups of respondents. In the analysis of the collected data, results revealed that both groups assessed the core literacies positively showing no significant difference in their rating. Such result further showed that the respondents relatively exhibit positive valuation of the core literacies. It was further revealed in the data that there are significant relationships identified among the core literacies included in the study. With these results, the research concluded the significance of traditional skills and cultural heritage in training for tennis as sport and provide for indexes on the core literacies included in the study.

Keywords: Core literacies; tennis; healthy behavior; sport ability; sports morality.

1. Introduction

From wrestling and boxing as the oldest sports to have been historically recorded to the worldwide trend on ball sports of basketball and football, sports have always been part of the life of humans in the globe. Its importance initially for recreation and enjoyment are now recognized even in the context of physical health as consequence. The introduction of sports in physical education would have led to the concept of Physical Education and Sports (PES) which was eventually incorporated in the curriculum of schools. PES, according to medical experts, is a backbone to an entire community in the 21st Century (Habyarimana, Tugirumukiza & Zhou, 2022). Indeed from this perspective, sports have evolved from its fundamental idea of physical exertion and recreation, to being a human activity involving not only of exerting physically but of developing skill as the primary focus of the activity, with elements of competition or social participation (Australian Sport Information Network, 2021).

Sports as integral element of teaching Physical Education in schools have now been lent indispensable. With worldwide recognition of sports such as evident in the Olympics and World Cups to name the biggest sporting competitions, the necessity of preparing athletes has now become evident. As a matter of fact, it is public knowledge that countries have been pouring a lot of efforts and support to boost sports in preparation for worldwide competitions. The World Health Organization (WHO) had its initiative on supporting sports in the world through its WHO Sport for Health Programme (WHO, 2023). The said program capitalized on helping people worldwide to lead healthy lives by promoting participation in sports and working with the sports community to achieve health for all. This manifest WHO's appreciation of sports as means to achieve this global health status.

In China, preparations and support for sports have not been limited with the athletes but it covers at the same time its population or all Chinese people. The government had already its eye on boosting the sports industry come 2025

through the 14th Five Year Plan for Sports Development covering 2021 to 2025 (Dezan Shira & Associates, 2022). In this development plan, the government's ambition for athletic development has been laid out as China is set to become a global sports power. This can be attained, according to the plan, by increasingly encouraging fitness among elite athletes and the population in general by enhancing fitness accessibility throughout the country. Furthermore, the said development plan is not just for the sake of boosting sports but for addressing pressing social and health issues as well.

To tease it out, the plan has put in place a special provision for specific demographics including elderly, women, and farmers but most importantly, students. Having each group a definite fitness plan, the students are projected to have two (2) hours a day of sports and fitness which include at least one hour or off-campus sports. Also, interestingly, the plan seeks to have more than two sports instructors available to every 1,000 residents, create or expand 2,000 fitness venues and add to these 5,000 fitness venues to be replenished. All these measures to improve fitness facilities for citizens to literally walk not more than 15-minutes to a venue to work out.

Surely, the vision of the Country shall develop not just a particular sport but all the sports therein including those which have yet to be popularized in the country like tennis. Tennis is a racket sport that is popular in Western countries where sports competitions popular as the Wimbledon exist. Although the more popular tennis in China is the table tennis or ping pong which is played by around 300 million players in the country (GMA, 2023), tennis is likewise gaining popularity as an estimated 14 million Chinese play tennis and almost one-fourth of the world's total (USC-US China Institute, 2023).

As the country envisions China dominating in sports, development among the younger population is crucial. To be able to achieve this in part, there is a need for students to be guided accordingly by teachers who are equally equipped with the core literacy of teaching tennis. The concept of core literacy have become a buzzword in the realm of education at

the onset of the 21st century. It is a general belief that core literacy is key to students' success and high-quality life in the 21st century hence, countries and organizations have determined what their core literacy should be. The United States for instance, had its core literacy framework anchored on 21st century learning, while the organization of the European Union (EU) had emphasis on lifelong learning. China, on the other hand, the core literacy determined is emphasized on "all-around development" geared towards the country's fundamental task of cultivating people by virtue (Chen & Wen, 2021). Furthermore, core literacy is deemed important in deepening curriculum reform, implementing the concretization of moral education, enhancing China's educational competitiveness and implementing strategy of strengthening the country with talents and rejuvenating the country through science and education (Chen & Wen, 2021).

2. Statement of the Problem

This study aims to investigate the relationship between the assessment of the respondents of the core literacy for tennis majors developed against the existing core literacy framework of Chinese students. The study explores the perception of core literacy index for tennis majors to effect curriculum reform and enhance educational competitiveness particularly in the teaching tennis as sports in China. The study shall specifically answer the following questions:

1. What is the assessment of the teacher respondents and tennis major students in the core literacy for tennis majors?
2. Is there a significant difference in the assessment of the teacher-respondents and the tennis major students on the core literacies identified in the study?
3. Is there a significant relationship between the core literacies assessed by the teacher-respondents and the tennis major students?
4. What core literacy index can be constructed from the data?

3. Hypotheses

H1. There is no significant difference in assessment of the teacher-respondents and the tennis major students on the core literacies identified in the study.

H2. There is no significant relationship between the core literacies assessed by the teacher-respondents and students.

4. Methodology

4.1. Research Design

The study utilized the quantitative design of constructing an index. Babbie (2011) and Spector (1992) provided three steps in index construction namely: 1) item or variable selection; 2) examining the empirical relationships of variables and combing these items into an index; and 3) validating the index. In this study, the development of the questionnaire satisfied the first step mentioned of item and variable selection. The second phase of examining the relationships of variables was done using the correlation and variation test. The determination of index shall be done along the analysis of the relationship. Then the third phase of validating the index was done after recalibrating the initial instrument created and drawing from there the core literacy index.

4.2. Instrumentation

The research instrument included the creation of a self-created questionnaire which served as the baseline indexes for the core literacy for tennis players. The same instrument was used to gather responses from the two groups of respondents in the research. The questionnaire was validated and pilot-tested to confirm its reliability and validity.

The self-created questionnaire was tailored to the research goals of this study and utilized a four-point Likert scale. The 4-point scale eliminated the neutrality to abandon the typical selection of participants to play safe in providing their responses. It included indicators identified through the perusal of various available literature on core literacy and indexing at the same time. The items were carefully developed to include the core literacy adopted in the study namely: sports ability, healthy behavior, and sports morality (Yin & Liang, 2020).

A comprehensive validation approach was used to confirm the questionnaire's reliability and validity. This included submitting the questionnaire to expert assessment and input to determine its content validity. The questionnaire's relevance, clarity, and comprehensiveness will be evaluated by experts in relevant field of education.

Following content confirmation, a pilot testing phase was carried out. The questionnaire was completed by a small sample of participants who are representative of the target community. The goal of the pilot testing was to evaluate the questionnaire's clarity, uncover any ambiguities, and change the language or structure of the questions as required. To ensure that the questionnaire was clear, intelligible, and simple to accomplish.

Based on the input received throughout the pilot-testing phase, required adjustments was made to enhance the questionnaire's clarity, validity, and reliability. Any confusing or unclear items were corrected, and more adjustments were made to improve the instrument's overall quality.

The research assured that the instrument used to gather data is trustworthy, valid, and relevant to the study's aims by creating a self-made questionnaire and putting it to a comprehensive validation and pilot-testing procedure. This method improved the quality of the data collected and increases the overall rigor and validity of the study results.

5. Results, analysis, and interpretation

This chapter discusses the result of the data gathered processed through the relevant statistical treatment to achieve an accurate approximation of the answers to the research questions. Tabular representations along with their interpretations and analyses obtained through the study are discussed in the succeeding parts. The findings regarding the assessment of the teacher respondents and tennis major students in the core literacy for tennis majors are shown in tabular forms after being analyzed with a licensed version of IBM® SPSS™ Statistics 26 to accurately draw comparisons between variables.

Moreover, to determine if there is a significant difference in the assessment of the respondents on the identified core literacies, a series of independent t-tests were conducted. Finally, to analyze if there is a significant relationship between core literacies assessed by the teacher-respondents and the tennis major students, Pearson's Correlation (r) was utilized.

Table 1 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Ability in Terms of Cultural Foundation

Indicators	Mean		Verbal Interpretation	Rank
1.Tennis majors need to learn traditional skills in playing tennis.	3.64	0.51	Highly Evident	1
2.Tennis majors can use traditional techniques in playing.	3.57	0.53	Highly Evident	5.5
3.Traditional skills can help in developing playing strategies in tennis.	3.56	0.51	Highly Evident	7
4.Traditional exercises can develop physical ability of a player.	3.57	0.53	Highly Evident	5.5
5.The current techniques of playing tennis can be effectively combined with traditional ones.	3.61	0.52	Highly Evident	3.5
6.Traditional strategies can be scientifically used to develop new strategies in playing tennis.	3.63	0.48	Highly Evident	2
7.Traditional practices are as effective as the modern way of playing tennis.	3.43	0.65	Highly Evident	10
8.Cultural foundation is essential in learning to play tennis.	3.49	0.64	Highly Evident	9
9.Scientific approach to playing tennis can be assisted with knowledge of culture and tradition.	3.61	0.50	Highly Evident	3.5
10.Strong cultural foundation is helpful in learning to play tennis.	3.55	0.58	Highly Evident	8
COMPOSITE MEAN	3.57	0.45	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not Evident at All); 1.51-2.50: Disagree (Slightly Evident); 2.51-3.50; Agree (Moderately Evident); 3.51-4.00: Strongly Agree (Highly Evident)

Table 1 shows the descriptive data gathered on the assessment of core literacies of tennis majors on Sports Ability in terms of Cultural Foundation. In this aspect, 10 indicators concerning cultural foundation with a composite mean of 3.57 (SD = 0.45), reaffirms the overall agreement among respondents regarding its significance in teaching and learning tennis. The mean values range from 3.43 to 3.64 with the standard deviation range of 0.48 to 0.65 which indicate a high level of agreement. This result leads to a relatively moderate level of variability in responses around the mean; hence, provides a summary measure of the collective perception of the importance of cultural literacy in the context of sports ability.

The leading indicator, Indicator 1, underscores the significance of embracing traditional tennis skills, reflected by its notable mean score of 3.64 a standard deviation of 0.51. This suggests a prevalent inclination among respondents towards acquiring age-old techniques inherited from preceding generations to enhance their contemporary tennis proficiency. The subsequent factors, echo the sentiment that traditional strategies serve as pivotal foundation for

developing new strategies (M = 3.63, SD =0.48). Moreover, the data suggests that the current techniques of playing tennis can be effectively combined with traditional ones (M =3.61, SD =0.52), and scientific approach to playing tennis can be assisted with knowledge of culture and tradition (M =3.61, SD =0.50). Ranking next in the hierarchy, indicators 2 and 4 states that tennis majors can effectively employ traditional techniques in playing (M =3.57, SD =0.53) and that traditional exercises can develop physical ability of a player (M =3.57, SD =0.53). Positioned as the seventh highest indicator, Indicator 3 suggests that such traditional skills can help in developing playing strategies in tennis (M =3.56, SD =0.51) which implies that the respondents see that traditional skills play a crucial role in formulating advanced strategies. Additionally, the respondents also expressed a belief in the importance of a strong cultural foundation in learning to play tennis (M =3.55, SD =0.58), emphasizing the essential role of cultural foundation in tennis education (M =3.49, SD =0.64), and indicating that traditional practices are as effective as the modern way of playing tennis (M =3.43, SD =0.65).

The respondents generally agree that traditional skills and techniques in tennis are highly relevant and effective which suggests that they recognize the value of historical practices in the enhancement and development of their contemporary playing styles and strategies. The data also indicate their

willingness to integrate traditional methods with modern techniques which reflect an adaptive and open-minded approach to tennis training and development. Moreover, the responses emphasize the importance of cultural foundation in learning to play tennis with relatively high mean scores. This suggests an acknowledgement of the role of culture and tradition not only in the acquisition of the skill, but also in shaping their overall approach to the sport. Finally, the respondents see the value of combining scientific approaches with cultural knowledge in tennis training which highlights a holistic perspective that recognizes the relationship of scientific principles and cultural context in sports development.

The study by Ramón Spaaij and Jonathan Magee (2014), published in "International Review for the Sociology of Sport", explored the impact of cultural diversity on team dynamics in Australian football. The research highlighted the importance of cultural literacy among coaches and team managers in effectively managing multicultural teams. It emphasized the need for coaches to understand the cultural backgrounds of their players to maximize team cohesion and

performance.

In addition to performance benefits, integrating traditional practices into sports training promotes cultural preservation and appreciation. By embracing and showcasing traditional techniques, athletes and sports organizations celebrate the heritage and contributions of diverse cultures to the sporting world. This can inspire future generations to explore their cultural roots and participate in sports with a deeper understanding of their cultural significance.

Traditional practices and cultural literacy are thereby highly relevant in contemporary sports training and performance. By incorporating traditional techniques, fostering cultural understanding, and promoting diversity, athletes and sports organizations can enhance performance, create inclusive environments, and celebrate cultural heritage.

In fine, the data underscores the nuanced relationship between cultural foundation and sports ability in tennis, highlighting the relevance of traditional practices and cultural literacy in contemporary sports training and performance.

1.2 Sports Ability in Terms of Independent Development

Table 2 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Ability in Terms of Independent Development

Indicators	Mean		Verbal Interpretation	Rank
1.Students must be willing to learn strategies on their own in playing tennis.	3.53	0.54	Highly Evident	10
2.Skills learned in the class should be used even outside the school.	3.60	0.52	Highly Evident	5.5
3.Students must be self-reflective of their use of strategies when playing tennis.	3.62	0.52	Highly Evident	3.5
4.Playing tennis not just in school is a good way to develop physical ability.	3.64	0.49	Highly Evident	1.5
5.Students should keep themselves up to date with information on playing tennis.	3.54	0.53	Highly Evident	9
6.Self-management must be a skill independently learned by students.	3.60	0.51	Highly Evident	5.5
7.Physical ability can be improved with one's personal health choice.	3.59	0.50	Highly Evident	7
8.Students need to be willing to achieve a healthy lifestyle.	3.62	0.49	Highly Evident	3.5
9.Healthy life improves skills in playing tennis.	3.56	0.54	Highly Evident	8
10.It is necessary for students to have manage on their own their physical development and skills.	3.64	0.49	Highly Evident	1.5
COMPOSITE MEAN	3.59	0.44	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not Evident at All); 1.51-2.50: Disagree (Slightly Evident); 2.51-3.50; Agree (Moderately Evident); 3.51-4.00: Strongly Agree (Highly Evident)

Table 2 presents the descriptive statistics concerning the evaluation of core literacies of tennis majors, specifically focusing on their sports ability in terms of independent development. This assessment encompasses indicators related to self-learning and reflection, application beyond the classroom, health and lifestyle, self-management, and healthy lifestyle. A notable trend in the data is pronounced emphasis on students' independent learning and self-management

towards the sport, as evidenced by mean scores ranging from 3.53 to 3.64. Moreover, the narrow range of standard deviations, spanning from 0.44 to 0.54, indicates a strong consensus among the respondents which generally mean a verbal interpretation of "Highly Evident". This collective response accentuates the respondents' value of self-directed learning and personal development in the context of tennis. It indicates a prevailing acknowledgement regarding the importance of intrinsic motivation - the personal drive to know, learn, and use knowledge and skills in day-to-day living - as an integral part of improving and mastering their tennis proficiency. Furthermore, students' willingness to be

involved in learning tennis is depicted as vital in shaping their core literacy on sports ability.

According to the analyzed data, the most agreed indicators are the fourth and tenth indicators stating that playing tennis not just in school is a good way to develop physical ability (M =3.64, SD =0.49) and that it is necessary for students to manage their own physical development and skills (M =3.64, SD =0.49). This means that the respondents also do their part of improving their physical ability and skills through practicing tennis even outside the schoolgrounds. It is also highly evident among the respondents that they agree with indicators three and eight which both garnered 3.62 mean scores: Students must be self-reflective of their use of strategies when playing tennis and Students need to be willing to achieve a healthy lifestyle. This only suggests that the students should use critical thinking and self-introspection for the improvement of their strategies towards a healthy lifestyle. Furthermore, they also agreed to the statements that the skills learned in the class should be used even outside the school (M =3.60, SD =0.52) and self-management must be a skill independently learned by students (M =3.60, SD =0.51). These statements may imply the routine of the students which should include tennis training or playing even out of the school hour for them to be equipped with independent self-management skills. The seventh indicator in rank tells that physical ability can be improved with one's personal health choice that garnered 3.59 mean score and 0.50 standard deviation. This concerns eating a well-balanced diet as well as engaging in physical activities which also is in line with the respondents' agreement that a healthy life improves skills in

playing tennis (M =3.56, SD =0.54). The data also reveals that the two indicators which garnered the least mean scores are the ones stating that students should keep themselves up to date with information on playing tennis (M =3.54, SD =0.53) and that students must be willing to learn strategies on their own in playing tennis (M =3.53, SD =0.54).

Over all, respondents emphasize the importance of the students to be proactive in learning strategies independently as well as reflecting on their own self-directed learning and self-awareness in skill development and improvement. The data also indicate the agreement in which the skills learned in class should be applied outside the school environment in order for the students to understand the importance of transferring classroom knowledge and applying it in the real-world context to reinforce learning and skills acquisition. It is also manifested in the analyzed data that the respondents recognize the interconnection of physical ability and skill improvement in tennis with personal health choices and healthy lifestyle. Finally, the respondents perceive that self-management and a healthy lifestyle are crucial components for the actualization of independent development in tennis.

Indeed, an individual's personal development significantly influences his/her ability in sports. Athletes who develop a growth mindset, establish challenging goals, and effectively manage stress and emotions are better equipped to excel in sports (Dweck, 2006). This therefore supports that sports ability is improved where one deliberately selects to self-improve.

1.3 Sports Ability in Terms of Social Participation

Table 3 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Ability in Terms of Social Participation

Indicators	Mean		Verbal Interpretation	Rank
1.Students can learn playing tennis by being exposed to other players.	3.63	0.51	Highly Evident	2
2.Sports strategies and techniques may be learned from playing with others.	3.64	0.50	Highly Evident	1
3.Studying the strategies and techniques of famous tennis athletes around the world improves sports cognition.	3.62	0.49	Highly Evident	3
4.It is important that students exhibit national identity when playing tennis.	3.56	0.57	Highly Evident	8
5.Skills in playing tennis must include an understanding of the game in a worldwide scale.	3.52	0.57	Highly Evident	9
6.Technology should be included in the physical training of students.	3.59	0.51	Highly Evident	5.5
7.Students must know how to develop their own style, techniques or strategy in playing tennis.	3.59	0.53	Highly Evident	5.5
8.Technology is a key element in the improvement of sports cognition.	3.57	0.54	Highly Evident	7
9.Playing tennis may be considered a profitable career where one is exemptional in his/her skills and ability.	3.46	0.64	Highly Evident	10
10.Technological solutions to the improvement of playing tennis is indispensable.	3.60	0.50	Highly Evident	4
COMPOSITE MEAN	3.58	0.45	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not Evident at All); 1.51-2.50: Disagree (Slightly Evident); 2.51-3.50; Agree (Moderately Evident); 3.51-4.00: Strongly Agree (Highly Evident)

Table 3 illustrates the assessment of the respondents'

perceptions of Sports Ability when it comes to social participation. This aspect revolves around the idea of exposing oneself into learning with and from other people who are inclined into the sport which could be of great help in one's enhancement. Through the result, it is perceptible that

social participation and tennis perspective on a global scale were considered important, with mean scores ranging from 3.46 (for the career potential of tennis) to 3.64 (for learning from others and studying famous athletes).

Gaining the highest mean, the respondents strongly agree that playing with others contributes significantly to learning sports strategies and techniques (M =3.64, SD =0.50). This underscores the value of practical experience and collaborative learning in honing tennis abilities. Similarly, the findings highly favor indicators stating that students can learn playing tennis by being exposed to other players (M =3.63, SD =0.51), and studying strategies and techniques of famous tennis athletes around the world improves sports cognition (M =3.62, SD =0.49). Respondents strongly agree that both playing with others and studying renowned athletes contribute significantly to learning sports strategies, techniques, and sports cognition. Other indicators which show high level of agreement tackles the incorporation of technology in the physical training of the students (M =3.59, SD =0.51), and that the students must know how to develop their own style, techniques, or strategy in playing tennis (M =3.59, SD =0.53).

The aforementioned indicators ranked fifth and sixth highest mean scores which suggest that there is a recognition that technology, individual creativity, and autonomy are valuable tools for training effectivity. It is also noticeable that respondents agree with the significance of technology as a key element in the improvement of sports cognition (M =3.57, SD =0.54), although it ranks slightly lower compared to the other factors. While still in agreement, the indicators stating that it is important to exhibit national identity when playing tennis (M =3.56, SD =0.57), skills in playing tennis must include an understanding of the game on a worldwide scale (M =3.52, SD =0.57), and playing tennis may be considered a profitable career where one is exceptional in his/her skills and ability (M =3.46, SD =0.64), are not considered as crucial in the context of playing tennis as the other factors, ranking as the eighth, ninth, and tenth with regards to the weighted mean.

Nonetheless, the data reflects a high agreement across the board regarding the various aspects related to tennis skills, strategies, technology, and career prospects. It also highlights the value of social learning and interaction through exposure to other players which suggests that peer learning and collaborative play are highly valued strategies for the improvement of tennis abilities. This further involves the role of observation, emulation, and a global perspective reflecting on famous athletes' strategies and techniques imply that learning from elite athletes worldwide is beneficial for improving one's own performance. Finally, the respondents see the essence of technology integration, individual creativity and autonomy, and career prospects in the field of learning tennis as a sport. In summary, the analysis exposes that multifaceted perspective in the factors influencing tennis skill development and participation, social interaction, observational learning, technological advancements, individual creativity, and career opportunities re all recognized as important aspects, with varying degrees of emphasis placed on each factor by respondents.

1.4 Sports Ability in Terms of Cultural Foundation, Independent Development, and Social Participation

Table 4 Overall Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Ability in Terms of Cultural Foundation, Independent Development, and Social Participation

Indicators	Mean	SD	Verbal Interpretation	Rank
Overall assessment of Cultural Foundation	3.57	0.45	Highly Evident	3
Overall assessment of Independent Development	3.59	0.44	Highly Evident	1
Overall assessment of Social Participation	3.58	0.45	Highly Evident	2
COMPOSITE MEAN	3.58	0.43	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not Evident at All); 1.51-2.50: Disagree (Slightly Evident); 2.51-3.50; Agree (Moderately Evident); 3.51-4.00: Strongly Agree (Highly Evident)

Table 4 shows the summarized assessment of teacher-respondents and tennis major students in the identified core literacy of tennis majors on Sports Ability which encompasses Cultural Foundation, Independent Development, and Social Participation. Garnering the mean score of 3.59 which is interpreted as “Highly Evident”, with a standard deviation of 0.44, independent development ranks one among the aspects which implies that the respondents value individual growth and progress in order to exemplify success in sports ability. The respondents are self-directed and that they focus more on their individuality and independency to hone sports skills and abilities to develop on their own, even without external influence or assistance. A high score here suggests that such development is clearly observable.

The second highest indicator is the assessment of sports ability in terms of social participation which scored a mean of 3.58 with a standard deviation of 0.45, interpreted as “Highly Evident”. This indicates the respondents' general agreement that engagement, involvement, and contribution within their field is an integral part of their advancement in the sport. Moreover, they believe that they can learn strategies and techniques through playing with other players and/or observing their movements in the field for the improvement of their sports cognition. The data gathered through the respondents' responses indicates that their active participation and socialization with other players is noticeable.

The third in rank is the assessment of Cultural Foundation which include factors such as cultural awareness, values, or identity. This aspect scored a mean of 3.57 with a standard deviation of 0.45. The verbal interpretation of “Highly Evident” suggests that the respondents nurture and develop their skills, techniques, and strategies through being acquainted with the traditional skills in playing tennis. This result shows that the indicators concerning one to have a strong cultural foundation is important to learn and acquire sports ability specifically in tennis sport.

Overall, based on the composite mean of 3.58 and a relatively low standard deviation of 0.43, the respondents, in consensus, strongly agree that sports ability which concerns Cultural Foundation, Independent Development, and Social Participation are crucial in playing tennis. The indicators garnered consistent positive assessment which suggests that these components are vital in the enhancement and development of the core literacy of tennis as sport.

1.5 Healthy Behavior in Terms of Cultural Foundation

Table 5 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Healthy Behavior in Terms of Cultural Foundation

Indicators	Mean	SD	Verbal Interpretation	Rank
Students must perceive that playing tennis is a healthy choice.	3.58	0.54	Highly Evident	4.5
One's physique is developed in playing tennis.	3.56	0.52	Highly Evident	8
Traditional practices in playing the game are something to be proud of.	3.50	0.57	Highly Evident	10
Playing tennis is a game that must be part of one's life even after school.	3.57	0.54	Highly Evident	6.5
Trying something new must not be perceived as against one's cultural foundation.	3.60	0.51	Highly Evident	2
One's culture is something to be proud of in developing in the game.	3.54	0.54	Highly Evident	9
Scientific approaches to playing tennis are not contrary to the traditional value of the game.	3.58	0.50	Highly Evident	4.5
Cultural foundation adds to the art of playing tennis.	3.57	0.52	Highly Evident	6.5
Maintaining cultural foundation is a healthy mindset in playing tennis.	3.59	0.50	Highly Evident	3
Tradition and innovation are helpful in approaching scientifically the sports tennis.	3.61	0.49	Highly Evident	1
COMPOSITE MEAN	3.57	0.46	Highly Evident	

Legend: 1.00–1.74: Strongly Disagree; 1.75–2.49: Disagree; 2.50–3.24: Agree; and 3.25–4.00: Strongly Agree

Table 5 provides descriptive statistics concerning the assessment of core literacies of tennis majors on healthy behavior in terms of cultural foundation. Evident to the results of the gathered data, the respondents strongly agree that physical health and respect for tradition are both considered important aspects of tennis. The idea that tennis should be a lifelong activity and that trying new approaches should not conflict with cultural foundations.

The highest-ranked indicator suggests strong agreement to have a balance between tradition and innovation ($M = 3.61$, $SD = 0.49$), since both are valuable in approaching tennis scientifically for modern advancements in the sport. The second one points out the idea of openness, innovation, and cultural acceptance of trying new things ($M = 3.60$, $SD = 0.51$) should not be perceived as against one's cultural foundation. Ranking as the third highest indicator, maintain cultural foundation is a healthy mindset in playing tennis ($M = 3.59$, $SD = 0.50$) which highlights the importance of cultural continuity and pride in fostering positive attitude towards the sport. The responses also show the perceptions that playing tennis is a healthy choice ($M = 3.58$, $SD = 0.54$) and scientific approaches to playing tennis are not contrary to the traditional values ($M = 3.58$, $SD = 0.50$). The data also suggests that there is a perceived value in the continuation of playing tennis beyond school years ($M = 3.57$, $SD = 0.54$), although it ranks in the middle among the listed factors. This implies that while

continuity is valued, it is not the highest priority. Same implications go with the agreement of the responses to the following set of indicators: that cultural foundation adds to the art of playing tennis, exemplifying that cultural diversity is seen as enriching the sport rather than detracting from it ($M = 3.57$, $SD = 0.54$); playing tennis contributes to the development of one's physique where its physical benefits are acknowledged, but may not be the primary focus ($M = 3.56$, $SD = 0.52$); one's culture is something to be proud of in the development of the game context ($M = 3.54$, $SD = 0.54$), and that while traditional practices in playing tennis are recognized ($M = 3.50$, $SD = 0.57$), they rank lowest in terms of importance among the listed factors. This indicates a relatively lower emphasis on the indicators compared to the other considerations.

The composite mean of 3.57 indicates a generally positive perception of the various aspects related to healthy behavior and cultural foundation in tennis. Respondents value the health benefits of tennis, acknowledge the importance of cultural identity, and recognize the compatibility between tradition and innovation in the sport.

1.6 Healthy Behavior in Terms of Independent Development

Table 6 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Healthy Behavior in Terms of Independent Development

Indicators	Mean	SD	Verbal Interpretation	Rank
Willingness to learn must be a consistent practice.	3.60	0.51	Highly Evident	4.5
Self-reflection is a helpful habit to develop.	3.62	0.49	Highly Evident	2.5
Keeping track of the development of the sports must be practiced.	3.55	0.56	Highly Evident	7
Learning gained in school must be used even outside the institution.	3.48	0.63	Highly Evident	9
Integrating what is learned as a student in tennis with everyday routine is a healthy mindset.	3.60	0.51	Highly Evident	4.5
Playing tennis must be integrated in day to day living.	3.39	0.70	Highly Evident	10
Finding significance or application of the sports to the daily routine is a good habit to develop.	3.62	0.49	Highly Evident	2.5
Playing tennis is good exercise and routine to relieve stress.	3.62	0.49	Highly Evident	2.5
Inclusion of playing tennis in a daily schedule is a good habit.	3.52	0.55	Highly Evident	8
Learning to play tennis helps in one's ability to self-manage.	3.58	0.52	Highly Evident	6
COMPOSITE MEAN	3.56	0.46	Highly Evident	

Legend: 1.00–1.74: Strongly Disagree; 1.75–2.49: Disagree; 2.50–3.24: Agree; and 3.25–4.00: Strongly Agree

Table 6 illustrates the respondents' perspectives on core literacy focusing on healthy behavior specifically on independent learning. With the goal independent development and a positive mindset that playing tennis is a healthy choice, the view of tennis as a stress-relieving exercise were highly valued with mean scores of 3.60 and 3.62. The integration of tennis into daily routines stresses the importance of incorporating tennis into daily life for mental

and physical well-being. It emphasizes consistent learning, self-reflection, and the social responsibility of promoting sports highlights the broader educational and communal roles of tennis, with mean scores ranging from 3.55 to 3.62.

Expanding further the responses in this aspect, three of the indicators rank the highest in terms of the weighted mean: self-reflection is a helpful habit to develop (M =3.62, SD =0.49), finding significance or application of the sports to the daily routine is good habit to develop (M =3.62, SD =0.49), and playing tennis is good exercise and routine to relieve stress (M =3.62, SD =0.49). This suggests that the above-mentioned factors are highly valued by the respondents in the context of tennis majors and healthy behavior. The indicators stating that the students' willingness to learn must be a consistent practice and the integration of the learned practices in tennis with everyday routine is a healthy mindset also got equivalent mean scores of 3.60 with a standard deviation of 0.51. Sixth in the rank indicates that learning to play tennis helps in one's ability to self-manage (M =3.58, SD =0.52). This is followed by indicators which highlight the inclusion of playing tennis into a daily schedule as a good habit (M =3.55, SD =0.56), learning gained in school should be used even outside the institution (M =3.52, SD =0.55), and playing tennis must be integrated in day-to-day living (M =3.39, SD =0.70).

To sum it up, the analysis suggests that the respondents highly value behaviors such as willingness to learn, self-reflection, and finding significance in sports for daily routines. Furthermore, it expands the notion of consistency in learning, personal development, integration of tennis into daily living, and stress relief and physical exercise, which are all beneficial to the tennis skills development. These findings can be interpreted as evidence supporting the positive impact of tennis majors on promoting healthy behavior and independent development. The high levels of agreement across indicators prove a shared understanding among participants regarding the importance of life-long learning and overall well-being.

1.7 Healthy Behavior in Terms of Social Participation

Table 7 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Healthy Behavior in Terms of Social Participation

Indicators	Mean	SD	Verbal Interpretation	Rank
1.Tennis players have social responsibility of promoting sports to the community.	3.55	0.53	Highly Evident	7
2.Playing tennis influences other people to get into sports (e.g. tennis).	3.56	0.50	Highly Evident	5.5
3.Through playing tennis, the Chinese identity is manifested.	3.48	0.61	Highly Evident	10
4.An exposure to the international game of tennis must be encouraged among students.	3.56	0.53	Highly Evident	5.5
5.Setting top tennis players around the world as example can create deeper appreciation in playing tennis among learners.	3.57	0.51	Highly Evident	2.5
6.Awareness of the sports in the international arena helps in the improvement of playing tennis.	3.58	0.50	Highly Evident	1
7.Technology helps in creating a habit of playing the game.	3.54	0.53	Highly Evident	8.5
8.Tennis a profitable career in the future creates the habit of playing the sports intensively among students.	3.54	0.56	Highly Evident	8.5
9.Developing a healthy habit about tennis is improved further by the use of technology (i.e. fitness app etc.)	3.57	0.50	Highly Evident	2.5
10.An understanding of the national goal of the country towards sports development encourages students to play tennis better.	3.56	0.51	Highly Evident	5.5
COMPOSITE MEAN	3.55	0.47	Highly Evident	

Legend: 1.00–1.74: Strongly Disagree; 1.75–2.49: Disagree; 2.50–3.24: Agree; and 3.25–4.00: Strongly Agree

Table 7 puts an emphasis on the respondents' descriptive statistics on the assessment of core literacies related to tennis

majors and their influence on healthy behavior, particularly in terms of social participation. The overall composite mean of 3.55 indicates a consistent agreement among all indicators which indicates a highly evident perception of the relationship between tennis majors and healthy behavior in terms of social participation.

The respondents communicate their belief that the awareness of the sport in the international arena helps in the improvement of playing tennis, receiving the highest mean score of 3.58. This indicator is also connected the second highest-ranked indicator which states that setting top tennis player around the world as example can create deeper appreciation in playing tennis among learners (M =3.57, SD =0.51). The first two indicators emphasize that being exposed and knowledgeable about the international skills and techniques of internationally recognized players would benefit the development of one’s skills. The consensus on the importance of exposing students to international tennis underscores the perceived value of global perspectives in nurturing a well-rounded understanding of the sport and its potential impact on healthy behavior. Moreover, the responses are highly favorable to the idea that technology further improves the development of a healthy habit about tennis (M =3.57, SD =0.50). It reflects the recognition of technology and digital tools as effective in promoting active participation in sports, aligning with contemporary trends in fitness and wellness. Playing tennis influences other people to get into sports (M =3.56, SD =0.50) was also an indicator that gained a strong agreement by the respondents where tennis players are regarded as advocates of sports within their communities and that athletes are influential agents in promoting healthy lifestyles. The notion about an exposure to the international game of tennis must be encouraged among students (M =3.56, SD =0.53) is also evident in the responses of the participants which highlights the understanding of national agenda of sports development emerges as motivating factor for students to actively participate in tennis. Furthermore, there is an understanding of the national goal of the country towards sports development encourages students to play tennis better (M =3.56, SD =0.51).

These indicators generally garnered corresponding moderate mean scores which suggest that among the factors concerning this aspect, they are seen as crucial, but not as prioritized as the other indicators with higher weighted mean scores. It is also noteworthy to discuss the following indicators for achieving the lowest scores among the factors presented: technology helps in creating a habit of playing the game (M =3.54, SD =0.53), tennis a profitable career in the future creates the habit of playing the sports intensively among students (M =3.54, SD =0.56), and through playing tennis, the Chinese identity is manifested (M =3.48, SD =0.61).

These insights are collective findings which underscore a prevailing consensus on the interconnectedness of tennis majors and healthy behavior promotion through social interaction. In fostering holistic well-being through sports engagement of the respondents, the participants affirm that athletes are role model whose actions inspire positive behavioral change among community members. They also indicate a widespread belief in the transformative power of tennis in shaping one’s attitudes and behavior whether through direct influence of top players or the indirect impact of technological advancements. Diverse and inclusive sports engagement are also seen acknowledged by the participants

wherein individuals find avenues for self-expression and connection with their cultural heritage. The emphasis on global awareness and skill development is also evident which further underscores the importance of exposure to international or broader global context for the athletes to be equipped of competitive play and contribute meaningfully to the sport’s continued growth and evolution. Finally, the alignment of individual aspirations with national sporting objectives implies the importance of fostering a sense of collective purpose and shared responsibility towards advancing sports development agendas.

1.8 Healthy Behavior in Terms of Cultural Foundation, Independent Development, and Social Participation

Table 8 Overall Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Healthy Behavior in Terms of Cultural Foundation, Independent Development, and Social Participation

Indicators	Mean	SD	Verbal Interpretation	Rank
Overall assessment of Cultural Foundation	3.57	0.46	Highly Evident	1
Overall assessment of Independent Development	3.56	0.46	Highly Evident	2
Overall assessment of Social Participation	3.55	0.47	Highly Evident	3
COMPOSITE MEAN	3.56	0.45	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not Evident at All); 1.51-2.50: Disagree (Slightly Evident); 2.51-3.50; Agree (Moderately Evident); 3.51-4.00: Strongly Agree (Highly Evident)

Table 8 provides the respondents’ overview of the descriptive statistics concerning the assessment of core literacies related to tennis majors and their impact on healthy behavior across three dimensions: Cultural Foundation, Independent Development, and Social Participation. Gaining the highest rank, cultural foundation with a mean score of 3.57 with a standard deviation of 0.46, indicates a strong agreement that tennis is not only perceived to be a sport, but also a vehicle to preserve heritage and cultural expression. The high mean score involves the significant role that the tennis players portray in fostering cultural identity and interconnectedness, representation in international tournaments, and cultural exchanges within the sport.

The second highest in rank is the overall assessment of Independent Development yielding a mean score of 3.56 which indicates a robust acknowledgement of tennis majors’ individual growth and self-reliance. This dimension encompasses aspects such as skills acquisition, personal discipline, and resilience cultivated through tennis participation. It suggests the recognition that tennis is an avenue for fostering autonomy, initiative, and self-improvement, all of which are valuable attributes for a healthy personal development.

With a mean score of 3.55, the participants indicate the significance of social participation in the actualization of tennis skills and strategies. It encompasses various forms of community involvement, collaborative endeavors, and formation of social bonds through tennis-related activities. The high mean score suggests that tennis serves as a catalyst

for social cohesion, networking, and community involvement, thereby contributing to the overall well-being of individuals and communities.

Overall, the composite mean of 3.56 in this data consolidates the individual assessment across the stated variables. This indicates a consistent pattern of strong agreement among respondents regarding the beneficial facets of tennis majors on healthy behavior. The high composite mean suggests a holistic perception that tennis is not only a physical activity, but also a transformative force that positively influences cultural, personal, and social dimensions of individuals' lives. This means that in general terms, the respondents manifest healthy behavior towards the sports showing further that engagement in the sport is reflective of a healthy choice.

1.9 Sports Morality in Terms of Cultural Foundation

Table 9 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Morality in Terms of Cultural Foundation

Indicators	Mean	SD	Verbal Interpretation	Rank
1. Respect for culture and tradition improves the appreciation of tennis as sport.	3.59	0.50	Highly Evident	3.5
2. Cultural foundation likewise provides disciplinary foundation in playing tennis.	3.58	0.51	Highly Evident	5.5
3. Culture is considered as vital in developing values in sports.	3.57	0.52	Highly Evident	7
4. Pride of one's culture helps gain confidence in playing tennis as sport.	3.59	0.50	Highly Evident	3.5
5. Discipline in tennis as sports is drawn from the cultural foundation of a student.	3.53	0.56	Highly Evident	10
6. Decisions arrived at in playing tennis are tempered by cultural foundation.	3.54	0.57	Highly Evident	9
7. Risk-taking or trying something new in playing tennis is not against tradition or culture.	3.59	0.50	Highly Evident	3.5
8. Culture helps in the scientific approach to sports morality.	3.56	0.52	Highly Evident	8
9. Sports morality includes both cultural foundation and scientific approach.	3.58	0.52	Highly Evident	5.5
10. Strong sense of identity provides better discipline in the sports.	3.59	0.53	Highly Evident	3.5
COMPOSITE MEAN	3.57	0.47	Highly Evident	

Legend: 1.00–1.74: Strongly Disagree; 1.75–2.49: Disagree; 2.50–3.24: Agree; and 3.25–4.00: Strongly Agree

Table 9 illustrates the analysis of core literacies of tennis majors on sports morality focusing on the cultural foundation aspect. The data expresses the respondents' strong belief in the importance of respecting culture and tradition to appreciate tennis as a sport, with mean score of 3.59. This suggests that cultural heritage is seen as a vital component of sports morality, providing a disciplinary foundation and enhancing the value of the sport. Discipline in tennis, derived from cultural foundations, was also highlighted as a key element of sports morality in tennis, with mean score of 3.59. This underlines the role of cultural values in shaping disciplined behaviors and decision-making processes in the sport. Notably, respondents also strongly agreed that taking risks and trying new techniques in tennis is compatible with cultural and traditional values, with a mean score of 3.59. This reflects an openness to innovation while maintaining respect for tradition. As this aspect of development appear to be contradictory, the respondents perceive it more of an integrative process than being separated. They see therefore, that traditional values are not hindrances to innovation in the sport. The first four indicators which are stated above ranks the highest among the factors of cultural foundation aspect. Next to them are the notions that cultural foundation likewise provides disciplinary foundation in playing tennis (M =3.58, SD =0.51) and that sports morality includes both cultural foundation and scientific approach (M =3.58, SD =0.52). With these in mind, the integration of scientific approaches with cultural foundations in sports morality also received strong support and a strong sense of identity was linked to better discipline and sports character, emphasizing personal development alongside technical skills.

There is also a strong consensus among the respondents agreeing that culture helps in the scientific approach to sports morality (M =3.56, SD =0.52), decisions arrived at playing tennis are tempered by cultural foundation (M =3.54, SD =0.57), and discipline in tennis as sports is drawn from the cultural foundation of a student (M =3.53, SD =0.56). This indicates that the respondents, despite rating these indicators high, view these factors as important but not as their priority in compared with other indicators presented. Nevertheless, the data reveals that cultural foundation concerning sports ability is an essential factor that they consider in the enhancement of their values with regards to tennis as a sport.

1.10 Sports Morality in Terms of Independent Development

Table 10 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Morality in Terms of Independent Development

Indicators	Mean	SD	Verbal Interpretation	Rank
1.Sports morality can be achieved in one's willingness to learn.	3.56	0.52	Highly Evident	9.5
2.Self-reflection is vital in developing sports morality.	3.58	0.50	Highly Evident	5.5
3.Awareness of information on tennis as sports creates sports character.	3.56	0.51	Highly Evident	9.5
4.Being open to discipline creates benefits to learners.	3.57	0.52	Highly Evident	7.5
5.Reflective thinking supports sports morality.	3.57	0.50	Highly Evident	7.5
6.Healthy lifestyle helps develop sports morality.	3.58	0.49	Highly Evident	5.5
7.Sports character is linked to healthy personality.	3.59	0.51	Highly Evident	1.5
8.Discipline in sports manifest self-management.	3.58	0.50	Highly Evident	5.5
9.Independence gives a good sense of sports character.	3.58	0.51	Highly Evident	5.5
10.In tennis, individuality is as important as team-building qualities.	3.59	0.50	Highly Evident	1.5
COMPOSITE MEAN	3.56	0.45	Highly Evident	

Legend: 1.00–1.74: Strongly Disagree; 1.75–2.49: Disagree; 2.50–3.24: Agree; and 3.25–4.00: Strongly Agree

Table 10 presents descriptive statistics concerning the assessment of core literacies of tennis majors on sports morality, specifically focusing on independent development. This aspect digs in deeper their own viewpoints regarding individuality and self-directed efforts towards the development of sports morality. Among the indicators, two statements concerning sports charactered is linked to healthy personality (M =3.59, SD =0.51) and individuality is important as team-building quality in tennis (M =3.59, SD =0.50) garnered the highest mean. This implies that majority, if not all of the respondents, treat these indicators as a priority in gaining sports morality. Moreover, the participants agree that psychological well-being and resilience are integral to ethical development and performance in sports and that one should nurture individual strength and contributions is essential to succeed in tennis.

The willingness to learn and engage in self-reflection were also considered crucial for developing sports morality, with mean scores of 3.56 to 3.58. Moreover, maintaining a healthy lifestyle was seen as complementary to fostering sports morality, highlighting the connection between physical well-

being and moral conduct. Playing tennis was associated with representing community values and the need for fairness, with mean scores of 3.57 and 3.58 respectively. This suggests that sports morality extends beyond individual conduct to encompass social responsibility and the promotion of community identity.

1.11 Sports Morality in Terms of Social Participation

Table 11 Descriptive Statistics on the Assessment of Core Literacies of Tennis Majors on Sports Morality in Terms of Social Participation

Indicators	Mean	SD	Verbal Interpretation	Rank
1.Playing tennis as sport entails representing the community and needs showing of sports morality.	3.57	0.51	Highly Evident	6.5
2.National identity is usually associated to the kind of sports morality a player has.	3.55	0.53	Highly Evident	8.5
3.Understanding tennis in an international perspective manifest sports character.	3.55	0.52	Highly Evident	8.5
4.Fairness in the sports is a social responsibility.	3.58	0.50	Highly Evident	4.5
5.The identity of a player reflects the community identity.	3.47	0.59	Highly Evident	10
6.As a career, the playing of table tennis must be approached with sports morality.	3.62	0.49	Highly Evident	1
7.Established sports morality provides solution to dilemmas or problems in the sporting community (i.e. sportsmanship as quality in playing).	3.58	0.50	Highly Evident	4.5
8.The integration of technology must also be tempered by sports morality.	3.59	0.50	Highly Evident	2
9.Having sports morality promotes solution than problems.	3.58	0.51	Highly Evident	4.5
10.Students must possess sports morality if they wish to improve in the sports.	3.57	0.53	Highly Evident	6.5
COMPOSITE MEAN	3.56	0.45	Highly Evident	

Legend: 1.00–1.74: Strongly Disagree; 1.75–2.49: Disagree; 2.50–3.24: Agree; and 3.25–4.00: Strongly Agree

Table 11 presents the data regarding the assessment of core literacies of tennis major on sports morality, specifically focusing on social participation. With a mean score of 3.62 and a standard deviation of 0.49, respondents recognize the importance of approaching tennis as a career with sports

morality. This implies that ethical conduct is essential for professional success and longevity in the sport. The second highest indicator states that the integration of technology must also be tempered by sports morality ($M = 3.59$, $SD = 0.50$), implying that advancements in technology should be aligned with ethical principles to preserve fairness and integrity in the sport. The integration of technology in tennis and approaching the sport as a career were both seen as requiring a foundation in sports morality. This indicates an understanding that ethical considerations should guide both the use of technology and professional conduct in sports.

Garnering equal mean score of 3.58, indicators 4, 7, and 9 ranks the third, fourth, and fifth highest, elaborating that fairness in sports is a social responsibility, established sports morality provides solution to dilemmas or problems in the sporting community, and having sports morality promotes solution than problems. All of the three indicators suggest that ethical behavior facilitates positive contributions and resolutions within the sporting community. The respondents also recognize that playing tennis as sport entails representing the community and needs showing of sports morality ($M = 3.57$, $SD = 0.51$), students must possess sports morality if they wish to improve in sports ($M = 3.57$, $SD = 0.53$), national identity is usually associated to the kind of sports morality a player has ($M = 3.55$, $SD = 0.53$), understanding tennis in an international perspective manifest sport character ($M = 3.55$, $SD = 0.52$), and the identity of a player reflects the community identity ($M = 3.47$, $SD = 0.59$).

In fine, the results reflected in the data indicated a strong belief in the importance of respecting culture and tradition to appreciate tennis as a sport, with mean scores around 3.59. This suggests that cultural heritage is seen as a vital component of sports morality, providing a disciplinary foundation and enhancing the value of the sport. It is therefore consequential that sports morality of the respondents reveals a strong adherence to cultural heritage and respect of the tradition as key ingredients in the development of the sport. The importance of culture cannot be undermined therefore when tennis as sport is studied or taught.

6. Conclusion

1. The teacher respondents and tennis majors perceive the value of traditional skills and techniques in playing tennis are crucial in the development of their current skills in playing the sport.

2. The respondents have positive assessment to healthy behavior and acknowledge the health benefits that playing tennis can provide.

3. Cultural heritage is seen as a vital component of sports morality, providing a disciplinary foundation and enhancing the value of the sport.

4. There was no statistically significant difference between the assessment of students and teachers on the core literacies of tennis major students.

5. There was a strong, positive, and statistically significant correlation between the core literacies in the study.

7. Recommendations

1. Traditional skills and techniques may be incorporated in the teaching of the sport as part of drills or lead-up skills when training.

2. Since the respondents have positive assessment of the sports as one that benefits the health of those who will play

the sport, integration of more specific health-related activities such as designing appropriate diet and exercise for students in the sport may be had.

3. Integration of practices related to cultural heritage may be done in the training of students to emphasize the value of traditional skills in tennis as sport.

4. Since the core literacies identified are perceived relatively similarly by the teacher-respondents and the students, the program for teaching and training tennis majors may be revisited to include negotiations between teachers and students in the teaching-learning process.

5. The program for training and teaching tennis majors may be designed focused on the core literacies identified in this research.

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