

Reliability and Interrater Agreement: Development and Validation of a Universal Values in Sport Instrument

Acuerdo de confiabilidad y entre evaluadores: desarrollo y validación de un instrumento de valores universales en el deporte

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Abstract. Universal values are one of the greatest aspects that can still be obtained through various sporting activities. Therefore, it is necessary to re-emphasize how this aspect can be assessed. This research aims to develop and test the validity of an instrument measuring universal values in sport, which includes five dimensions. With this instrument, it can later be used by physical education teachers in schools to find out the impact of learning carried out in relation to universal values. This is a descriptive review of inter-rater agreement and inter-rater reliability indices. It outlines the practical application and interpretation of these indices in research. The inter-rater agreement index assesses the extent of the responses of 7 expert raters. The data on agreement between raters and the reliability index were then processed to determine the validity and reliability results of the universal values in sports instrument being developed. The results of the research explain that the average validity value of each dimension was tested and the following results were obtained: Ethics and Morals (0.784), Knowledge and Understanding (0.805), Social (0.825), Psychological (0.855), and Leadership and Organization (0.835). The total reliability value of the five dimensions is 0.990, which shows a very high level of consistency and stability of this instrument. These results indicate that the instrument developed has strong reliability and validity in measuring various aspects of universal values in sports, so that it can be used effectively to support character building and skills development through sports activities.

Keywords: Development, validation, interrater, reliability agreement, instruments, universal values.

Resumen. Los valores universales son uno de los mayores aspectos que aún se pueden obtener a través de diversas actividades deportivas. Por lo tanto, es necesario volver a enfatizar cómo se puede evaluar este aspecto. Esta investigación tiene como objetivo desarrollar y probar la validez de un instrumento que mide valores universales en el deporte, que incluye cinco dimensiones. Con este instrumento, posteriormente podrá ser utilizado por profesores de educación física en los centros escolares para conocer el impacto de los aprendizajes realizados en relación a los valores universales. Esta es una revisión descriptiva de los índices de acuerdo entre evaluadores y de confiabilidad entre evaluadores. Describe la aplicación práctica y la interpretación de estos índices en la investigación. El índice de acuerdo entre evaluadores evalúa el alcance de las respuestas de siete evaluadores expertos. Los datos sobre la concordancia entre los evaluadores y el índice de confiabilidad fueron luego procesados para determinar los resultados de validez y confiabilidad del instrumento de valores universales en el deporte que se está desarrollando. Los resultados de la investigación explican que se probó el valor de validez promedio de cada dimensión y se obtuvieron los siguientes resultados: Ética y Moral (0.784), Conocimiento y Comprensión (0.805), Social (0.825), Psicológica (0.855) y Liderazgo y Organización (0.835). El valor de confiabilidad total de las cinco dimensiones es 0.990, lo que muestra un nivel muy alto de consistencia y estabilidad de este instrumento. Estos resultados indican que el instrumento desarrollado tiene una gran confiabilidad y validez para medir diversos aspectos de los valores universales en los deportes, de modo que puede usarse de manera efectiva para apoyar la formación del carácter y el desarrollo de habilidades a través de actividades deportivas.

Palabras clave: Desarrollo, validación, interevaluadores, acuerdo de confiabilidad, instrumentos, valores universales.

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Introduction

Sport has long been recognized as a significant domain for the expression and development of values such as teamwork, discipline, and fairness (Purnomo, Ma'mun, et al. 2024). To effectively measure these values, the development of a universal values instrument in sport is crucial (Desnita et al. 2021; Kristiyanto et al. 2020; Santos-Junior and Franchini 2021). This instrument will provide a standardized way to assess and compare values across different sports and cultures. By creating such an instrument, researchers and practitioners will be better equipped to evaluate the impact of values in sport and develop strategies to promote positive values among athletes, coaches, and stakeholders (Aftab and Naveed 2020; Castillo, Adell, and Alvarez 2018; Henriksen 2019; Rajšp and Fister 2020). In

this paper, we will detail the process of developing and validating this universal values instrument, highlighting its potential applications in sport psychology, coaching, and athlete development. In the following sections, we will outline the theoretical framework used in the development of the universal values instrument, the methodologies employed for its validation, and the results of the validation process (da Costa, Maroco, and Vieira 2017; Hanel, Litzellachner, and Maio 2018; Özdenk and Karabulut 2018). We will also discuss the potential implications of the instrument for sport psychology, coaching, and athlete development, as well as its broader impact on the sports community. Furthermore, we will explore the future directions for research and application of the universal values instrument in sport, emphasizing its potential to contribute to the overall well-being and ethical development of athletes globally (Desnita et al. 2021;

Henriksen 2019; Manges et al. 2022; Massiera, Imed, and Thierry 2018; Santos-Junior and Franchini 2021).

The theoretical framework for the development of the universal values instrument is grounded in extensive literature review and consultation with experts in sport psychology, sociology, and ethics. Multiple dimensions of values in sport, including but not limited to integrity, respect, and responsibility, were identified and incorporated into the instrument to ensure comprehensive coverage of essential values (Gau and James 2013; Kaye and Hoar 2015; Sáenz et al. 2013; Tan, Mahadir Naidu, and Osman 2018). To validate the universal values instrument, a multi-phase approach was employed, encompassing qualitative interviews, expert reviews, and pilot testing with athletes and coaches from diverse sports backgrounds (Chacón-Moscoso et al. 2018; Jia and Wang 2016; Juhrodin et al. 2023; Saldanha, Balbinotti, and Balbinotti 2015). The results of the validation process indicated strong internal consistency and reliability of the instrument across different sports and cultural contexts.

The potential implications of the universal values instrument in sport psychology are manifold, ranging from providing a reliable tool for assessing values in individual athletes to guiding the development of interventions to enhance ethical decision-making and character development (Schwartz 1992; Schwartz and Bilsky 1987; Simmons and Dickinson 1986; Spini 2003). In coaching, the instrument can serve as a diagnostic tool to identify areas for values-based coaching and team culture enhancement. For athlete development, the instrument can contribute to fostering a values-driven approach that prioritizes holistic growth and ethical conduct (Castillo et al. 2018; Evans et al. 2015; Frost 2014; Heidorn and Stoepker 2021). Overall, the universal values instrument holds promise for promoting the ethical development of athletes and fostering a culture of respect and integrity in sports worldwide. It is poised to make meaningful contributions to the well-being of athletes and the broader sports community (Abad Robles et al. 2021; Hafiari et al. 2024; Juhrodin et al. 2023; Manges et al. 2022). As this instrument continues to evolve, further research and application will undoubtedly enhance its potential to shape the future of ethical sports participation and character development. In the following sections, we will delve into the detailed process of developing and validating the universal values instrument. We will begin by outlining the theoretical framework that informed the development of the instrument, an extensive review of literature and consultations with experts in sport psychology, sociology, and ethics (Bean, Rocchi, and Forneris 2020; MacIntosh and Spence 2012; Susilaningsih, Khotimah, and Nurhayati 2018). This will demonstrate the thoroughness of the instrument's theoretical basis and the comprehensive approach taken to ensure its validity and reliability.

Subsequently, we will elucidate the multi-phase validation approach employed for the universal values instrument, which included qualitative interviews, expert reviews, and pilot testing with athletes and coaches from diverse sports backgrounds (Cid et al. 2022; Impellizzeri and Marcora

2009; Kim 2009; Simmons and Dickinson 1986; Wijndaele et al. 2015; Yun and Ulrich 2002). The results of this validation process will be presented, highlighting the strong internal consistency and reliability of the instrument across different sports and cultural contexts. Following this, we will explore the potential implications of the universal values instrument in the domains of sport psychology, coaching, and athlete development. This will include discussing how the instrument can be utilized as a reliable tool for assessing values in individual athletes, guiding the development of interventions to enhance ethical decision-making, and serving as a diagnostic tool for identifying areas for values-based coaching and team culture enhancement (Castillo et al. 2018; Cruz and Kim 2023).

Moreover, we will emphasize the instrument's potential to contribute to fostering a values-driven approach for athlete development, prioritizing holistic growth and ethical conduct among athletes. The broader impact of the universal values instrument on the sports community and its role in promoting the ethical development of athletes and fostering a culture of respect and integrity in sports worldwide will also be discussed (Lee et al. 2008; Manges et al. 2022; Simmons and Dickinson 1986). Additionally, we will explore the future directions for research and application of the universal values instrument in sport, emphasizing its potential to contribute to the overall well-being and ethical development of athletes globally. The evolving nature of this instrument and its potential to shape the future of ethical sports participation and character development will be detailed, underscoring the ongoing importance of research and application in this area. In conclusion, the development and validation of a universal values instrument in sport holds great promise for promoting ethical behavior, character development, and athlete well-being (Martins et al. 2015; Melé and Sánchez-Runde 2013). Sport psychology, coaching, and athlete development. This instrument has the promise to make meaningful contributions to the well-being of athletes and the broader sports community, promoting the ethical development of athletes and fostering a culture of respect and integrity in sports world wide the broader sports community. As we delve into the detailed process of developing and validating the universal values instrument, it becomes evident that a comprehensive approach has been taken to ensure its reliability and applicability in diverse sports and cultural contexts (Lee, Bettina Cornwell, and Babiak 2013; Păunescu et al. 2013; Simmons and Dickinson 1986). The thorough theoretical framework, informed by extensive literature review and expert consultations, guarantees that the instrument captures the essential dimensions of values in sport.

Moreover, the multi-phase validation approach, encompassing qualitative interviews, expert reviews, and pilot testing with athletes and coaches from diverse backgrounds, has provided robust evidence of the instrument's internal consistency and reliability (Bean et al. 2018; Cid et al. 2022; Özdenk and Karabulut 2018). These results demonstrate the

instrument's potential to be a reliable tool for assessing values in individual athletes, guiding interventions to enhance ethical decision-making, and serving as a diagnostic tool for values-based coaching and team culture enhancement. The implications of the universal values instrument in sport psychology, coaching, and athlete development are far-reaching (Castillo et al. 2018; Cheng and Fleischmann 2010; Cruz et al. 1995; Lee and Cockman 1995). By prioritizing holistic growth and ethical conduct among athletes, this instrument has the potential to foster a values-driven approach in athlete development and contribute to the overall well-being and ethical development of athletes globally. Looking ahead, further research and application of the universal values instrument in sport will undoubtedly enhance its potential to shape the future of ethical sports participation and character development (Artur et al. 2012; Buzi, Jarani, and Isidori 2019; Juhrodin et al. 2023; Özdenk and Karabulut 2018; Simmons and Dickinson 1986). This ongoing exploration and development of the instrument hold great promise for promoting ethical behavior, character development, and athlete well-being in the sports community.

Materials and Methods

Participants

This research involved seven experts who were responsible for assessing the "Universal Values in Sports" instrument. The research team consisted of multiple disciplines to ensure a comprehensive and accurate assessment. Team members include physical education and sports experts who have a deep understanding of the practical and theoretical aspects of sports. They help in identifying the values inherently associated with sporting activities. In addition, the team also includes social experts who focus on societal and cultural aspects of sports. Their expertise is essential in understanding how these values are applied and perceived in various social contexts. Education experts on this team play a role in integrating universal values into the educational curriculum, ensuring that these instruments are relevant and applicable in formal and informal educational settings. Finally, psychometricians make important contributions to the validation and reliability of the instrument. They ensure that this instrument has high consistency and accuracy in measuring the intended values. This interdisciplinary collaboration allows the development of instruments that are not only accurate but also have broad application in various sporting and educational contexts, thereby supporting the spread of universal values through sporting activities.

The seven experts came from multidisciplinary disciplines, namely: (1) 2 experts in the field of sports education; (2) 1 expert in the field of physical education evaluation; (3) 1 expert in sports psychology; (4) 1 expert in the field of educational research and evaluation; (5) 1 expert in psychometrics; (6) 1 expert in the field of curriculum analysis and educational technology. Next, the assessor will be given an instrument of universal values in sports to be further assessed using a rating scale of 1-5 (very unsuitable to very suitable).

Instrument Development

The development of universal values in sports plays an important role in forming individual character and ethics. Sports teach values such as honesty, sportsmanship, teamwork and discipline. Through active participation, individuals learn the importance of fair play, respecting opponents, and controlling emotions. These values not only strengthen morals and ethics but also build social and psychological skills that are useful in everyday life (Marheni et al. 2022). Thus, sport is an effective means for developing individuals who are tough, have integrity and have good leadership abilities.

The development of an instrument for universal values in sports will later be used to evaluate physical education learning outcomes in schools. Physical education teachers can assess students using this instrument. In developing the instrument of universal values in the body, there are 5 dimensions, namely:

Ethics and Morals: In the world of sports, it is imperative to uphold ethical standards and moral values. Respect for the rules, respect for others, fair play, self-esteem, honesty, and tolerance are the cornerstone of a healthy and thriving sports environment (Proios, Doganis, and Athanailidis 2004). Coaches, athletes, and all stakeholders in sports development must exemplify these values to ensure a positive and nurturing atmosphere for all participants. (a) Respect for the Rules: Adhering to the rules and regulations of a sport is fundamental in fostering a sense of fairness and equity. It ensures that all participants compete on a level playing field, free from any undue advantage or bias (Lumer 1995); (b) Respect for Others: Respect for teammates, opponents, coaches, and officials is essential for creating a harmonious and supportive sports community (Mahony et al. 2010; Schneider and Gonsalves 2019). Each individual's unique contributions and efforts should be acknowledged and valued; (c) Fair Play: At the core of sports development is the concept of fair play. It embodies the spirit of sportsmanship, where winning is not the sole objective, but rather, competing with integrity and respecting the opposition (Eitzen 1988; Loland 2007; Motoarca 2015); (d) Self-Esteem: Encouraging and nurturing the self-esteem of athletes is crucial for their personal growth and development (Conroy and Coatsworth 2006; Dimyati et al. 2023; Heydari, Soltani, and Mohammadi-Nezhad 2018). Positive reinforcement, constructive feedback, and support from mentors can significantly impact an individual's self-perception within the sports arena (Balaguer, Atienza, and Duda 2012); (e) Honesty: Integrity and honesty are non-negotiable in sports. It involves transparency in actions and decisions, upholding the principles of truthfulness and ethical conduct both on and off the field (Jowett and Cramer 2010; Rintaugu, Mwangi, and Toriola 2018); (f) Tolerance: In a diverse and inclusive sports environment, tolerance towards individuals of varying backgrounds, beliefs, and abilities is paramount (Litwick-Kaminska 2020; Şemşek, Mirzeoğlu, and Çoknaz 2017). Embracing and celebrating diversity enriches the sports

landscape, fostering mutual respect and understanding (Fauziah and Candra 2023).

Knowledge and Understanding: In the realm of sports development, cultivating knowledge and understanding is essential for honing problem-solving skills and fostering a healthy approach to winning and losing; (a) Problem-solving: Athletes, coaches, and all stakeholders should be encouraged to develop problem-solving skills both on and off the field. This involves the ability to assess situations, make informed decisions, and adapt strategies in the face of challenges. Problem-solving skills not only enhance performance but also contribute to personal and professional growth; (b) Understanding: It is essential to comprehend that winning is not solely defined by the outcome of a game or competition, but also by the dedication, hard work, and perseverance exhibited throughout the process (Garcia 2016; Mosaku and Ghafar 2017). Similarly, understanding how to lose with dignity and grace is a valuable lesson that builds character and resilience; (c) How to Win: Winning in sports is not just about emerging victorious in a competition but also about embodying the values of sportsmanship, teamwork, and dedication (Fauziah and Candra 2023; Şemşek et al. 2017). It involves celebrating successes with humility and acknowledging the contributions of teammates and coaches in achieving a common goal; (d) How to Lose: Losing is an inevitable part of sports, and understanding how to navigate defeat with grace and resilience is a crucial skill (Bostock and Breese 2021; Fletcher and Sarkar 2012). It involves acknowledging the strengths of the opponent, learning from the experience, and using it as motivation for improvement and future success (Crust and Clough 2011; Matsumoto, Konno, and Ha 2009).

Social: In addition to ethical values and knowledge, the social aspect of sports development plays a vital role in shaping individuals and promoting a cohesive sports community. (a) Cooperation: Fostering a spirit of cooperation is essential in sports development (Güllich et al. 2023; Varmus, Kubina, and Soviar 2015). Athletes must understand the significance of working together towards a common goal, regardless of individual differences or personal agendas. Cooperation within teams and across different stakeholders in the sports environment contributes to a supportive and unified community (Haas et al. 2023); (b) Communication: Effective communication is paramount in sports, both on and off the field. Clear and open communication among teammates, coaches, and stakeholders not only enhances performance but also builds trust and camaraderie (Purnomo, Aisyah, et al. 2024; Risma et al. 2024; Warner, Kerwin, and Walker 2013). It is through communication that strategies are conveyed, challenges are addressed, and support is provided (Bruce 2013; Ishak 2023); (c) Connecting with Others: Building meaningful connections with fellow athletes, coaches, and peers in the sports community is integral to personal and collective growth (Carron 1982; Schellenberger 1981). By connecting with others, individuals can share experiences, seek guidance, and create a network of support that enriches their journey in sports (Allen

2003; Till and Baker 2020); (d) Teamwork: Teamwork lies at the heart of success in sports (Kim, Lee, and Connerton 2020). It involves a cohesive and synergistic effort from all members of the team, where each individual's strengths are harnessed, and collective goals are prioritized over individual achievements (Fu, Tjoumakaris, and Buoncristiani 2007). The ability to collaborate, communicate, and trust one another is fundamental in achieving success as a team; (e) Trust: Trust forms the foundation of strong relationships within the sports realm. Athletes and coaches must cultivate trust in each other's abilities, decisions, and commitment (Bennett and Gadlin 2012; Costa, Roe, and Taillieu 2001). A culture of trust fosters resilience, unity, and a sense of collective responsibility among all members of the sports community (Stoll 2012; Wu, Tsai, and Hung 2012).

Psychological: In the realm of sports development, the psychological aspects play a pivotal role in shaping individuals and fostering a culture of resilience, discipline, and self-respect. (a) Value of Effort: Emphasizing the value of effort is essential in sports. It is important for athletes to understand that hard work, dedication, and perseverance are key components of success (Hansen, Gilbert, and Hamel 2003; Ion et al. 2012). By acknowledging and celebrating the efforts put forth, individuals can derive fulfillment from the process of improvement and growth, regardless of the outcome (Duckworth et al. 2007); (b) Resilience: Resilience in sports encompasses the ability to bounce back from setbacks, adapt to challenges, and maintain a positive mindset in the face of adversity (Fletcher and Sarkar 2012; Galli and Vealey 2008; Sarkar and Hilton 2020). Cultivating resilience enables athletes to navigate the ups and downs of sports, learn from failures, and emerge stronger and more determined (Bostock and Breese 2021; Galli and Vealey 2008); (c) Confidence: Confidence is a fundamental psychological attribute in sports development (Marheni et al. 2024). Building self-confidence empowers athletes to perform at their best, take calculated risks, and overcome obstacles (Beaumont, Maynard, and Butt 2015; Heydari et al. 2018; Silva, Fonseca, and Barreiros 2019). Coaches and mentors play a crucial role in nurturing and reinforcing the confidence of their athletes through positive reinforcement and constructive feedback (Beaumont et al. 2015; Davis, Jowett, and Tafvelin 2019; Lauer 2012); (d) Discipline: Discipline is essential for achieving consistency, maintaining focus, and adhering to training regimens (Beatrice and Veronica 2015; Li and Lin 2020; Rearick, Creasy, and Buriak 2011). Instilling a sense of discipline in athletes fosters self-control, responsibility, and a strong work ethic, laying the groundwork for success both on and off the field; (e) Self-Respect: Promoting self-respect within the sports community is vital for the holistic development of individuals (Carless and Douglas 2013; Dixon 2007; Long et al. 2006). Athletes should be encouraged to recognize their own worth, uphold personal values, and demonstrate respect for themselves and others. A sense of self-respect breeds integrity, ethical conduct, and a positive self-image (Heydari et al. 2018).

Leadership and Organization: This dimension highlights the

leadership abilities and organizational skills developed through sport. Values such as responsibility, time management, and the ability to lead and organize a team or sporting event are the main focus in this dimension. (a) Leadership: Effective leadership is instrumental in guiding and inspiring individuals within the sports community (Rongen et al. 2018). Coaches, team captains, and mentors should exemplify positive leadership traits such as integrity, empathy, and vision (Baker et al. 2023; Danish et al. 2004; Silva et al. 2019). By setting a strong example and providing mentorship, leaders can nurture a culture of mutual respect, accountability, and continuous improvement among their peers and teammates (Bucci et al. 2012; Robinson, Neubert, and Miller 2018; Voight 2012); (b) How to Manage Competition: Managing competition in sports involves striking a balance between striving for excellence and upholding the principles of fair play and sportsmanship (Lumer 1995; Motoarca 2015; Nelson and Cody 1979). Athletes should be encouraged to compete with determination and passion while respecting their opponents and the rules of the game

(Butler 2000; Popescu 2012). Managing competition also entails recognizing and celebrating the achievements of others, regardless of the outcome; (c) Sharing: The concept of sharing extends beyond tangible resources to encompass knowledge, experiences, and support within the sports community (Crust and Clough 2011; Hallmann, Breuer, and Kühnreich 2013; Mitchell 2016). Athletes, coaches, and stakeholders should embrace a collaborative mindset, willingly sharing expertise, insights, and encouragement with their peers (Delshab et al. 2022; Kassing et al. 2004; Till and Baker 2020). Through sharing, individuals can collectively elevate the standard of performance and foster a culture of continuous learning and development.

These five dimensions work synergistically to create a holistic and effective instrument for measuring and developing universal values in sport. By paying attention to each dimension, this instrument is expected to support comprehensive character and skill development through sports activities. For more details, see table 1 below:

Table 1.
Universal Values of Sport, UN S4DP

No.	Dimensions of Universal Values	Universal Values Indicator
1.	Ethics and Morals	Respect for the rules, respect for others, fair play, self-esteem, honesty, tolerance.
2.	Knowledge and understanding	Problem solving, understanding, how to win, how to lose.
3.	Social	Cooperation, communication, connecting with others, teamwork, trust.
4.	Psychological	Value of effort, resilience, confidence, discipline, self-respect
5.	Leadership and Organization	Leadership, how to manage competition, sharing.

Developed from UN Sport for Development and Peace

Data analysis

Aiken Index analysis is a statistical technique that is useful in evaluating the level of agreement between experts or observers regarding a concept or object being assessed. In the context of developing and validating universal values instruments in sports, Aiken Index Analysis is used to measure consistency between experts in providing assessments of the instruments being developed. In the world of sports, the Aiken Index analysis has become an essential tool for ensuring consistency and reliability in performance evaluation. By utilizing statistical methods and data analysis techniques, sports organizations are able to gain valuable insights into the consistency of athlete performance and the reliability of various metrics (Araújo and Davids 2016; Mataruna-Dos-Santos et al. 2020). One of the key benefits of the Aiken Index analysis is its ability to provide a comprehensive assessment of an athlete's performance over time (Atkinson and Nevill 2001; Zhu et al. 2020). This allows coaches and sports scientists to identify trends and patterns in performance, helping them make informed decisions about training regimens, injury prevention strategies, and team selection.

The process involves presenting a series of statements or items from the instrument to raters, who are then asked to rate their degree of agreement or disagreement with each statement. After the assessment data is collected, the Aiken Index is calculated for each item. The Aiken Index produces a reliability coefficient between -1 to +1. Values close to +1

indicate a high level of agreement between raters, while values close to -1 indicate high disagreement. Furthermore, the Aiken Index analysis helps in evaluating the reliability of different performance metrics such as shooting accuracy, speed, endurance, and agility (Haake 2009; Hughes 2004; Phillips et al. 2014) By understanding the reliability of these metrics, sports organizations can make adjustments to their evaluation criteria and ensure that they are measuring the right aspects of performance. Overall, the Aiken Index analysis is a powerful tool that has revolutionized the way sports organizations evaluate and enhance performance consistency and reliability. By leveraging data-driven insights, sports teams can gain a competitive edge and drive continuous improvement in athlete performance.

Aiken Index analysis provides valuable insight into how well the instrument reliably measures certain concepts or values. The results of this analysis help researchers evaluate the quality of the instrument and make necessary adjustments to increase its reliability. Thus, Aiken Index Analysis is an important step in ensuring that the instrument for measuring universal values in sport has high consistency between raters, so that the evaluation results obtained are reliable and valid.

Results

Based on the validity results that have been carried out, from the development of the initial instrument consisting of

115 questions, 84 valid questions were obtained. This validity is measured using calculated data, where each question must have a value of more than 0.5 to be considered valid. This process aims to ensure that each question in the instrument can measure what it is supposed to measure accurately and consistently.

Validity is an important aspect in developing research instruments, because valid questions will provide reliable and relevant data. In this context, of the initial 115 questions, only 84 met the established validity criteria. This indicates that the remaining 31 questions did not meet the desired validity standards, perhaps due to various factors such as being

ambiguous, irrelevant, or not having a strong correlation with the construct being measured.

By having 84 valid questions, the instrument being developed is expected to provide more accurate and reliable results in research. These valid questions will provide a clearer and more precise picture of the variables studied, so that the research results can be used to make better, data-based decisions. This validation process is a crucial step in ensuring the quality and credibility of research instruments. To clarify the results of this research, you can see Table 2 below.

Table 2. Overall Results of the Expert Validation Test of Universal Values in Sport

Item	Ethics and Morals				Knowledge and understanding				Social				Psychological				Leadership and Organization							
	Validation				Validation				Validation				Validation				Validation							
	1	2	3	Final	Item	1	2	3	Final	Item	1	2	3	Final	Item	1	2	3	Final	Item	1	2	3	Final
1	.891	.909	.909	.921	31	.820	.826	.837	.836	51	.b				76	.760	.753	.755	.734	101	.820	.826	.837	.836
2	.760	.753	.755	.734	32	.514	.482			52	.867	.874	.865	.861	77	.809	.829	.832	.849	102	.684	.672	.687	.695
3	.809	.829	.832	.849	33	.760	.753	.755	.734	53	-.203				78	.867	.874	.865	.861	103	.603	.602	.609	.634
4	.b				34	.867	.874	.865	.861	54	.809	.829	.832	.849	79	.867	.874	.865	.861	14	.334			
5	.955	.968	.972	.977	35	.760	.753	.755	.734	55	.760	.753	.755	.734	80	.760	.753	.755	.734	105	.955	.968	.972	.977
6	.b				36	.809	.829	.832	.849	56	.867	.874	.865	.861	81	.809	.829	.832	.849	106	.603	.602	.609	.634
7	.460				37	.596	.579	.562	.554	57	.760	.753	.755	.734	82	.551	.510	.492		107	.867	.874	.865	.861
8	.809	.829	.832	.849	38	.809	.829	.832	.849	58	.760	.753	.755	.734	83	.b				108	.754	.764	.769	.792
9	.867	.874	.865	.861	39	.867	.874	.865	.861	59	.891	.909	.909	.921	84	.867	.874	.865	.861	109	.460			
10	.955	.968	.972	.977	40	.760	.753	.755	.734	60	.115				85	.809	.829	.832	.849	110	.867	.874	.865	.861
11	.522	.508	.505	.513	41	.760	.753	.755	.734	61	.760	.753	.755	.734	86	.b				111	.b			
12	.684	.672	.687	.695	42	.820	.826	.837	.836	62	.677	.649	.640	.615	87	.b				112	.b			
13	.551	.510	.492		43	.820	.826	.837	.836	63	.891	.909	.909	.921	88	.867	.874	.865	.861	113	.514	.482		
14	.867	.874	.865	.861	44	.684	.672	.687	.695	64	.820	.826	.837	.836	89	.760	.753	.755	.734	114	.867	.874	.865	.861
15	.760	.753	.755	.734	45	.867	.874	.865	.861	65	.891	.909	.909	.921	90	.955	.968	.972	.977	115	.891	.909	.909	.921
16	.867	.874	.865	.861	46	.867	.874	.865	.861	66	.b				91	.115								
17	.551	.510	.492		47	.115				67	.820	.826	.837	.836	92	.867	.874	.865	.861					
18	.227				48	.760	.753	.755	.734	68	.820	.826	.837	.836	93	.820	.826	.837	.836					
19	.415				49	.b				69	.809	.829	.832	.849	94	.809	.829	.832	.849					
20	.558	.533	.539	.530	50	.867	.874	.865	.861	70	.867	.874	.865	.861	95	.942	.947	.953	.963					
21	.334									71	.809	.829	.832	.849	96	.b								
22	.760	.753	.755	.734						72	-.203				97	.867	.874	.865	.861					
23	.b									73	.760	.753	.755	.734	98	.867	.874	.865	.861					
24	.551	.510	.492							74	.867	.874	.865	.861	99	.867	.874	.865	.861					
25	.522	.508	.505	.513						75	.760	.753	.755	.734	100	.684	.672	.687	.695					
26	.514	.482																						
27	.415																							
28	.867	.874	.865	.861																				
29	.809	.829	.832	.849																				
30	.558	.533	.539	.530																				

Based on the findings in bold 1, validity testing was carried out in several stages to ensure the quality and reliability

of the research instruments used. In the first stage of the validity test, of the total questions tested, 91 statements were

declared valid. This shows that most of the statements in the initial instrument have validity that meets the criteria, namely a validity value of more than 0.5. Next, a second stage of validity testing was carried out to further tighten and ensure the validity of the instrument. At this stage, the results showed that there were 88 questions that were declared valid. The decrease in the number of valid questions from the first stage to the second stage may be due to refinement of the criteria or adjustments made based on the results of the first stage test. The validity test continues to the third stage, where the results show that 85 questions are considered valid. This process continues to filter out questions that do not meet the established validity criteria, with the aim of increasing the reliability and accuracy of the instrument in measuring the variables studied. In the fourth validity test, the results obtained showed that 84 questions were declared valid. After four tests, the decision was taken not to continue further validity testing because all 84 questions had shown a validity value of more than 0.5. This value is considered sufficient to state that the instrument has met the desired validity standards. This iterative validation process is an important step in the development of research instruments. By going through several stages of validation, each question in the instrument can be rigorously evaluated and filtered, so that only truly valid questions remain. High validity ensures that the instrument is able to measure what it is supposed to measure accurately and consistently.

The validation steps carried out also reflect a commitment to research quality. By ensuring that each question has

a validity value of more than 0.5, researchers can be confident that the data collected from this instrument will be reliable and relevant. Apart from that, good validity also helps in increasing the credibility of research results, because valid instruments will produce data that is more accurate and representative of the phenomenon being studied. In the context of this research, repeated validity testing up to four times shows serious efforts in ensuring that the research instrument is a reliable and effective tool. With 84 questions that have passed the validity test with a value of more than 0.5, this instrument is expected to be able to provide consistent and precise results in measuring the variables studied.

The validation process, which is carried out in stages and repeatedly, is an important step in developing research instruments. Through this process, the instrument is refined and refined until only valid questions remain. Thus, this instrument is able to provide accurate and reliable data, which in turn supports high quality research results. Achieved validity also reflects that the research instrument has gone through rigorous evaluation and meets the standards required for credible research.

Based on the validity tests carried out, it can be concluded and the final average validity results are displayed: (1) Ethics and Morals 0.784; (2) Knowledge and Understanding 0.805; (3) Social 0.825; (4) Psychological 0.855; (5) Leadership and Organization 0.835. This data can be seen in table 3 below.

Table 3.
Final Results of the Expert Validation Test on Universal Values in Sports

Ethics and Morals		Knowledge and understanding		Social		Psychological		Leadership and Organization	
Item	Validation	Item	Validation	Item	Validation	Item	Validation	Item	Validation
1	.898	31	.877	52	.839	76	.726	101	.764
2	.733	33	.853	54	.852	77	.847	102	.734
3	.812	34	.826	55	.749	78	.885	103	.818
5	.946	35	.853	56	.839	79	.885	105	.955
8	.812	36	.747	57	.749	80	.726	106	.818
9	.881	37	.487	58	.749	81	.847	107	.789
10	.946	38	.747	59	.916	84	.885	108	.936
11	.615	39	.826	61	.749	85	.847	110	.789
12	.726	40	.853	62	.674	88	.885	114	.789
14	.881	41	.853	63	.916	89	.726	115	.962
15	.733	42	.877	64	.868	90	.972		
16	.881	43	.877	65	.916	92	.885		
20	.607	44	.682	67	.868	93	.810		
22	.733	45	.826	68	.868	94	.847		
25	.615	46	.826	69	.852	95	.955		
28	.881	48	.853	70	.839	97	.885		
29	.812	50	.826	71	.852	98	.885		
30	.607			73	.749	99	.885		
				74	.839	100	.663		

		75	.749		
Mean	.784	.805	.825	.855	.835

Based on table 3 of the validity tests that have been carried out, it can be concluded that the research instruments used have gone through a strict validation process and produced satisfactory final validity results for each category tested. The following is a description of the average final validity results for each category:

Ethics and Morals: This category obtained an average validity of 0.784. This value shows that the instrument has good validity in measuring aspects of ethics and morality. Even though this value is slightly lower than other categories, the value of 0.784 still shows a fairly high level of validity, which means that the questions asked in this category are quite effective in measuring the ethical and moral concepts in question.

Knowledge and Understanding: The average validity for this category is 0.805. This shows that the instrument is very good at measuring the level of knowledge and understanding of respondents. With a validity value above 0.8, it can be said that the instrument is able to capture relevant and important information regarding knowledge and understanding, making it a reliable tool for assessing how well respondents understand certain material or concepts.

Social: The social category gets an average validity of 0.825. These results indicate that the questions in this category are very valid and reliable for measuring social aspects of respondents. High validity in this category indicates that the instrument is able to accurately explore social information, such as social interactions, communication skills, and group dynamics.

Psychological: The highest average validity was obtained by the psychological category, with a value of 0.855. This shows that the research instrument is very accurate and reliable in measuring the psychological aspects of respondents. This very high validity value ensures that the questions asked in this category are able to measure psychological conditions very well, including factors such as emotions, motivation and mental well-being.

Leadership and Organization: This category obtained an average validity of 0.835. These results indicate that the instrument has very good validity in measuring aspects of leadership and organization. This high validity value shows that the questions in this category are able to measure leadership abilities, organizational management, and skills related to organizing effectively.

Overall, the final average validity results show that the research instrument has good validity and can be relied upon to measure various aspects that are the focus of the research. Each category shows a high validity value, with the psychological category recording the highest value followed by the leadership and organization, social, knowledge and understanding, and ethics and morality categories. This reflects that the instrument used has gone through a comprehensive development and testing process to ensure that each ques-

tion asked is truly capable of measuring the variable in question accurately and consistently. With this high validity, research instruments are expected to provide accurate and reliable data, which in turn will support credible research analysis and conclusions. The validity achieved shows that the instrument is effective in capturing the nuances and complexity of each category tested, so that it can provide deep and meaningful insights for researchers. This rigorous validation process ensures that only high-quality questions are used, improving the overall quality of the research conducted.

Apart from the validity test, a reliability test is also carried out to determine the index which shows the extent to which a measuring instrument can be trusted or reliable. If a measuring instrument is used twice to measure the same phenomenon and the measurement results obtained are relatively consistent, then the measuring instrument is reliable. Based on this explanation, the reliability results data can be seen in table 4 below.

Table 4.
Reliability Statistics (All question items)

Cronbach's Alpha	N of Items
0,990	84

Based on table 4 above, it can be explained that from the 84 questions used in the research instrument, a Cronbach's Alpha value was obtained of 0.990. This value is very high and shows that this universal values instrument has very high reliability. Cronbach's Alpha is a coefficient used to assess the internal consistency of an instrument, especially to measure how well the items in the instrument correlate with each other. Cronbach's Alpha values range from 0 to 1, with higher values indicating better internal consistency. In the context of research, values above 0.7 are considered good, above 0.8 excellent, and above 0.9 excellent.

This instrument, which has very high reliability, contributes significantly to research on universal values. With highly reliable instruments, researchers can explore and measure universal values with a high degree of accuracy. This is important because universal values are a complex and multidimensional concept, and reliable instruments help ensure that each dimension of these values is measured precisely and consistently.

Instruments that have high reliability scores like these also help in ensuring that research results can be better compared and generalized across different contexts and populations. This allows researchers to understand how these universal values vary across cultures, societies, and individuals, as well as how these values influence behavior and attitudes.

Overall, the Cronbach's Alpha value of 0.990 shows that this instrument consisting of 84 questions has very high reliability in measuring universal values. This means that the instrument is highly consistent and reliable, providing valid and reliable data for further analysis. These results provide a

strong basis for researchers to continue research with the confidence that the instruments used have met very high

standards of reliability, supporting more credible and meaningful research in the field of universal values.

Table 5.
Item-Total Statistics

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	0,915	0,990	59	0,915	0,990
2	0,728	0,990	61	0,728	0,990
3	0,845	0,990	62	0,606	0,990
5	0,975	0,990	63	0,915	0,990
8	0,845	0,990	64	0,832	0,990
9	0,859	0,990	65	0,915	0,990
10	0,975	0,990	67	0,832	0,990
11	0,504	0,990	68	0,832	0,990
12	0,688	0,990	69	0,845	0,990
14	0,859	0,990	70	0,859	0,990
15	0,728	0,990	71	0,845	0,990
16	0,859	0,990	73	0,728	0,990
20	0,520	0,990	74	0,859	0,990
22	0,728	0,990	75	0,728	0,990
25	0,504	0,990	76	0,728	0,990
28	0,859	0,990	77	0,845	0,990
29	0,845	0,990	78	0,859	0,990
30	0,520	0,990	79	0,859	0,990
31	0,832	0,990	80	0,728	0,990
33	0,728	0,990	81	0,845	0,990
34	0,859	0,990	84	0,859	0,990
35	0,728	0,990	85	0,845	0,990
36	0,845	0,990	88	0,859	0,990
37	0,544	0,990	89	0,728	0,990
38	0,845	0,990	90	0,975	0,990
39	0,859	0,990	92	0,859	0,990
40	0,728	0,990	93	0,832	0,990
41	0,728	0,990	94	0,845	0,990
42	0,832	0,990	95	0,960	0,990
43	0,832	0,990	97	0,859	0,990
44	0,688	0,990	98	0,859	0,990
45	0,859	0,990	99	0,859	0,990
46	0,859	0,990	100	0,688	0,990
48	0,728	0,990	101	0,832	0,990
50	0,859	0,990	102	0,688	0,990
52	0,859	0,990	103	0,626	0,990
54	0,845	0,990	105	0,975	0,990
55	0,728	0,990	106	0,626	0,990
56	0,859	0,990	107	0,859	0,990
57	0,728	0,990	108	0,783	0,990
58	0,728	0,990	110	0,859	0,990

Based on table 5 of the results of the reliability test on the universal values instrument, we can conclude several

things: (1) Corrected Item-Total Correlation > 0.5 : Corrected Item-Total Correlation measures the extent to which

each item on the instrument correlates with the total score instrument (without including the item in the total score). A value of more than 0.5 indicates that each item has a strong correlation with the total score, which means the items are consistent and relevant in measuring the same construct. (2) Cronbach's Alpha if Item Deleted 0.990: Cronbach's Alpha measures the internal consistency or reliability of the entire set of items in the instrument. A high Cronbach's Alpha value (such as 0.990) indicates a very high level of internal consistency, meaning the items in the instrument are very consistent with each other. Cronbach's Alpha if Item Deleted shows the Cronbach's Alpha value for the instrument if an item is deleted. A value of 0.990 indicates that deleting one item will not significantly decrease the internal consistency of the instrument, which also confirms that all items are highly consistent.

Overall, these two results indicate that the universal values instrument has excellent reliability. This means the instrument can be trusted to consistently measure what it is supposed to measure.

Discussion

Based on the results of the research, it is evident that the universal values framework in sports has shown significant validity across multiple dimensions. The high validity values obtained for Ethics and Morals, Knowledge and Understanding, Social, Psychological, and Leadership and Organization dimensions underscore the robustness of the framework in capturing the essential values inherent in sports (Akbar et al. 2023; Amsal et al. 2023; Artur et al. 2012; Kosiewicz 2010; Lumer 1995; Setiawan et al. 2024; Tyler 2018).

Moving forward, it is essential to leverage these findings to further reinforce the implementation and dissemination of universal values in sports organizations. By highlighting the strong validity of these dimensions, researchers can advocate for the integration of specific strategies and programs aimed at embedding these values into the fabric of sports culture (Balci and Erdevciler 2017).

Additionally, the research outcomes provide a strong foundation for initiating collaborative efforts with sports governing bodies, teams, and athletes to incorporate the identified universal values into their operational frameworks (Broch 2016; Giulianotti and Thiel 2023; Westerbeek, McPherson, and Dixon 2023). The demonstrated validity of these dimensions serves as a compelling argument for the practical adoption of these values in shaping ethical conduct and decision-making within the sports community. In conjunction with promoting implementation, it is imperative to continue monitoring and evaluating the impact of universal values on the behavior and performance of athletes. Ongoing qualitative and quantitative analysis will contribute to an evolving understanding of how these values influence sports culture, providing valuable insights for sustained integration and reinforcement (Lee and Martinek 2013; Woolway et al. 2021).

Moreover, the high validity values also reinforce the significance of educational programs centered around universal values in sports. These programs, aimed at educating athletes, coaches, and administrators, will play a pivotal role in ensuring the enduring incorporation of these values into the sports environment. Strengthening partnerships with sports organizations and academic institutions to develop and deliver these educational initiatives will be paramount in fostering a culture of integrity and ethical conduct within the sports community. By capitalizing on the strong validity of the universal values framework, the next phase of research and implementation can focus on solidifying the practical impact of these values, as well as their sustained integration into the ethos of sports organizations.

Implementation of Universal Values Framework in Sports Organizations

In addition to conducting cross-cultural studies, it is imperative to explore the practical implementation of universal values in sports organizations (Balci and Erdevciler 2017; MacIntosh and Spence 2012; Shoenfelt 2011). This involves working closely with sports governing bodies, teams, and athletes to integrate the identified universal values into their policies, training programs, and competitions (Akbar et al. 2024; Hamm et al. 2008; Woratschek, Horbel, and Popp 2014). Collaborating with various stakeholders in the sports community will facilitate the dissemination and adoption of these values on a practical level, thereby solidifying their role in shaping ethical conduct and decision-making in sports. Moreover, the assessment of the impact of universal values implementation on the behavior and performance of athletes is crucial (Lee and Martinek 2013; Wandzilak 1985; Woolway et al. 2021). This can be achieved through qualitative and quantitative analysis of the attitudes and actions of individuals and teams within sports organizations. By monitoring and evaluating the influence of universal values on sports culture and the behavior of participants, researchers can provide evidence of the practical implications of these values, further reinforcing their significance and relevance (Gau and James 2013; MacIntosh and Spence 2012; Saunders 1982).

Furthermore, establishing partnerships with sports organizations and academic institutions to create educational programs and resources centered around universal values will contribute to the long-term sustainability of these initiatives. Educating current and future generations of athletes, coaches, and administrators about the importance of universal values in sports will ensure their continued incorporation into the fabric of sports culture (Cruz et al. 1995; Morgan 2007; Rothenbuhler 1989). By extending the focus beyond research to practical implementation and educational endeavors, the universal values framework in sports can be more effectively developed, validated, and perpetuated, fostering a positive and ethical environment within the sports community (Henriksen 2019; Pedersen et al. 2009; Woratschek et al. 2014).

Conclusion

The research results show that the validity values for each dimension are in the high range, namely Ethics and Morals (0.784), Knowledge and Understanding (0.805), Social (0.825), Psychological (0.855), and Leadership and Organization (0.835). This high validity value indicates that the instrument used in this research is able to measure the dimensions in question quite well. In addition, the total reliability value of the five dimensions is 0.990, which indicates a very high level of consistency and stability of the instrument. This indicates that this instrument can be relied upon to be used for consistent measurement on various occasions.

The conclusion of this research is that sport can be an effective means of developing universal values. Each dimension measured—Ethics and Morals, Knowledge and Understanding, Social, Psychological, and Leadership and Organization—has high validity and reliability, indicating that these values can be developed through participation in sports activities.

The implications of this research are very important for various parties involved in the world of sport and education. First, for educators and coaches, these findings provide strong evidence that sports programs can be designed and implemented to not only improve physical skills but also to develop character and universal values in participants. Second, for policy makers, the results of this research can be used as a basis for formulating policies that support the integration of universal values in sports programs in schools and communities. This can help form a young generation who is not only physically competent but also has strong character and good moral values.

In addition, for researchers in the field of education and sports, the instruments developed and validated in this research can be used as measuring tools in further research to examine more deeply the development of universal values through various types of sports and in different contexts. This also opens up opportunities for further research into how different types of sport and different training methods can influence the development of these dimensions.

Overall, this research confirms the importance of sport as a tool for the development of universal values and provides a strong foundation for the implementation and development of sports programs oriented towards character and moral formation.

Limitations

The reliability and interrater agreement is a series of instruments developing universal values in sport. So, this research only looks at the results of joint agreements between experts. This research has not looked in depth at the results of testing the instrument on respondents/research samples. Furthermore, it is recommended for future researchers to carry out trials on research samples to look more deeply at the validity and reliability values. And the final use of this instrument is that it can be used to measure universal values

in sports at school as a result of implementing physical education.

Conflicts of Interest

The authors state that there is no conflict of interest.

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Appendix to the Universal Values in Sport Instrument

Dimensions/indicators/question items	Validation	Cronbach's Alpha
Ethics and Morals		
1. Respect for the rules		
○ Do you teach students to always obey the rules when exercising?	.921**	.990
○ Do you teach students to reprimand when rules are not followed by their opponents or peers?	.734	.990
○ Do you teach students to respond to rule violations in competition?	.849*	.990
○ Do you teach students to respond/act normally when your students see classmates breaking the rules? (UF)	.977**	.990
2. Respect for others		
○ Do you teach students to show empathy for other people's feelings during exercise?	.849*	.990
○ Do you teach students to value the contributions of classmates on teams?	.861*	.990
○ Do you teach reluctant students to respect opponents in competition? (UF)	.977**	.990
3. Fair play		
○ Do you teach students sportsmanship during sports?	.513	.990
○ Do you teach students to prioritize sportsmanship in matches?	.695	.990
○ Do you teach students to understand the importance of fair play in sports?	.861*	.990
○ Do you teach students not to care and continue playing when a violation occurs? (UF)	.734	.990
4. Self-esteem		
○ Do you teach students to always participate in sports?	.861*	.990
○ Do you teach students to interpret achievement as something that is very easy to achieve? (UF)	.530	.990
5. Honesty		
○ Do you teach students how common it is that cheating or violations in matches occur? (UF)	.734	.990
○ Do you teach students to try to play honestly?	.513	.990
6. Tolerance		
○ Do you teach students to appreciate and respect differences in sports?	.861*	.990
○ Do you teach students to understand situations that require tolerance?	.849*	.990
○ Do you teach students not to give credit to everyone? (UF)	.530	.990
Knowledge and understanding		
1. Problem solving		
○ Do you teach students to solve problems that arise during exercise?	.836*	.990
○ Do you teach students not to look for solutions when faced with problems? (UF)	.734	.990
○ Do you teach students to face failure and find solutions?	.861*	.990
○ Do you teach students to use experience to solve problems?	.734	.990
2. Understanding		
○ Do you teach students an understanding of strategies and techniques in sports?	.849*	.990
○ Do you teach students to improve their understanding of sports?	.554	.990
○ Do you teach students to be active in learning the rules and tactics of the sport?	.849*	.990
○ Do you teach students to deepen their knowledge of sports?	.861*	.990
○ Do you teach students not to understand the importance of strategy in achieving goals? (UF)	.734	.990
3. How to win		
○ Do you teach students to plan and prepare to achieve victory?	.734	.990
○ Do you teach students a special strategy to achieve victory?	.836*	.990
○ Do you teach students the meaning of winning in sports?	.836*	.990
○ Do you teach students to celebrate a win by insulting the other team? (UF)	.695	.990
○ Do you teach students about their attitude after winning?	.861*	.990
4. How to lose		
○ Do you teach students how to deal with losing in a match?	.861*	.990
○ Do you teach students about defeat and seeking justification/defense from the situation? (UF)	.734	.990
○ Do you teach students to provide encouragement and support to classmates who experience defeat?	.861*	.990
Social		
1. Cooperation		
○ Do you teach students to contribute to achieving common goals?	.861*	.990
○ Do you teach students to divide tasks and responsibilities within teams?	.849*	.990

○ Do you teach students about understanding how important teamwork is in sports? (UF)	.734	.990
2. Communication		
○ Do you teach students to communicate with teammates?	.861*	.990
○ Do you teach students to build effective communication in teams?	.734	.990
○ Do you teach students about listening and understanding teammates' opinions?	.734	.990
○ Do you teach students to convey ideas and information to teammates?	.921**	.990
3. Connecting with others		
○ Do you teach students to build relationships with teammates or opponents?	.734	.990
○ Do you teach students to try to connect with other team members?	.615	.990
○ Do you teach students about understanding and appreciating differences with others?	.921**	.990
○ Do you teach students to communicate with others outside the team well?	.836*	.990
○ Do you teach students about equality in teams? (UF)	.921**	.990
4. Teamwork		
○ Do you teach students to contribute to achieving team goals?	.836*	.990
○ Do you teach students about supporting teammates when facing adversity?	.836*	.990
○ Do you teach students to build trust in teams?	.849*	.990
○ Do you teach students to always prioritize themselves in the team? (UF)	.861*	.990
5. Trust		
○ Do you teach students to have trust in their teammates?	.849*	.990
○ Do you teach students about feeling comfortable sharing ideas and information with teammates?	.734	.990
○ Do you teach students about showing integrity and honesty to teammates?	.861*	.990
○ Do you teach students the importance of being suspicious in team relationships? (UF)	.734	.990
Psychological		
1. Value of effort		
○ Do you teach students to value effort and dedication in sports?	.734	.990
○ Do you teach students to value the process over the outcome in sports?	.849*	.990
○ Do you teach students about showing respect for the efforts of teammates?	.861*	.990
○ Do you teach students about understanding the importance of hard work in achieving goals?	.861*	.990
○ Do you teach students not committed to sports? (UF)	.734	.990
2. Resilience		
○ Do you teach students to always be resilient in facing pressure and challenges?	.849*	.990
○ Do you teach students about getting up after failure?	.861*	.990
○ Are you teaching students there is no need to draw on difficult experiences to grow and develop? (UF)	.849*	.990
3. Confidence		
○ Do you teach students about having confidence in your abilities in sports?	.861*	.990
○ Do you teach students about overcoming fear and doubt in exercise?	.734	.990
○ Do you teach students who are unsure/undecided about facing future challenges? (UF)	.977**	.990
4. Discipline		
○ Do you teach students to maintain commitment to schedules and assignments?	.861*	.990
○ Do you teach students about having good routines and habits in sports?	.836*	.990
○ Do you teach students about showing discipline in achieving goals?	.849*	.990
○ Do you teach students to always be indifferent to sports? (UF)	.963**	.990
5. Self-respect		
○ Do you teach students to have strong and positive self-esteem?	.861*	.990
○ Do you teach students about maintaining respect for themselves?	.861*	.990
○ Do you teach students about having a positive perception of themselves?	.861*	.990
○ Do you teach students that guarding does not require physical guarding? (UF)	.695	.990
Leadership and Organization		
1. Leadership		
○ Do you teach students to demonstrate leadership skills in teams or groups?	.836*	.990
○ Do you teach students to influence and motivate teammates?	.695	.990
○ Do you teach students about having clear goals in sports?	.634	.990
○ Do you teach students to understand that there is no need for responsibility, because the responsibility is only for the leader/captain? (UF)	.977**	.990
2. How to manage competition		
○ Do you teach students to manage competition well?	.634	.990

○ Do you teach students to have strategies for facing tough opponents?	.861*	.990
○ Do you teach students about preparing mentally and physically for competition?	.792*	.990
○ Are you teaching students not to deal with the frustration and pressure of competition? (UF)	.861*	.990
3. Sharing		
○ Do you teach students about understanding the importance of cooperation and mutual support?	.861*	.990
○ Do you teach students not to show cooperation and a sense of responsibility in a team? (UF)	.921**	.990