

# Analysis of Perceived Values in Participation in the Central Region University Sports League Event

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## *Abstract*

**Purpose:** The purposes of this study were threefold: to develop the “Perceived Values Scale for the Central Region University Sports League Event,” to examine the potential differences in perceived values among participants with different demographic characteristics and participation behaviors, and to assess the predictive power of perceived values on participants’ intentions for future participation. **Methods:** The participants were athletes who registered for the general division of the 2020 Central Region University Sports League Basketball Tournament (CRUSLBT). The instruments included the newly-developed perceived values scale, demographic characteristics, participation behaviors, and items related to future participation intentions. The data were analyzed through principal component analysis, internal consistency analysis, *t*-test, one-way ANOVA, and multiple regression analysis. **Results:** The results revealed that: (1) Principal component analysis extracted three factors, namely developmental value, educational value, and transmission value based on the loaded items. Internal consistency analysis showed excellent internal consistency for all three extracted factors. (2) Higher-grade participants perceived higher developmental value from participating in the tournament, while those with previous participation exhibited greater awareness of the developmental and transmission values. Additionally, starting players demonstrated heightened perceptions of developmental, educational, and transmission values. (3) The regression model composed of developmental, educational, and transmission values accounted for 33% of the variance in future participation intentions, with developmental value being a significant predictor. **Conclusion:** Based on the results, the researchers provide recommendations to the league organizing committee for enhancing event management as well as to other sports organizations engaged in similar events.

**Keywords:** intercollegiate league, home and away game system, Olympic education, sportsmanship

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## *Introduction*

### **Contemporary Trends in Sports in Taiwan**

In recent years, Taiwan's sports culture has seen significant growth in tandem with the rising awareness of national health. According to the 2019 Sports Participation Survey by the Sports Administration, Ministry of Education, the participation rate in sports in Taiwan is as high as 82.8%, with a regular sports participation rate of 33%; this consistent high participation rate for over thirteen years reflects the government's commendable efforts in promoting national sports policies (Sports Administration, Ministry of Education, 2020). Among various sports activities, competitive sports, in particular, have garnered significant attention. Outstanding athletes contribute significantly to the country's economy, culture, and image. Therefore, the Taiwanese government actively organizes sporting events to cultivate talented athletes and enhance the nation's athletic prowess (Huang et al., 2014).

As Yen (2000) pointed out, the burgeoning sports and leisure culture has also extended to higher education, linking collegiate sports with national sports. Sports clubs have increased noticeably on university campuses, contributing to a thriving sports atmosphere. Within this atmosphere, participation in university sports club activities is most concentrated in basketball, volleyball, and badminton (Sports Administration, Ministry of Education, 2019). According to the investigation from the Sports Administration, Ministry of Education (2018), basketball ranks fifth among the most commonly practiced sports activities in the general population, making it the most popular ball sport. Among males aged 18 to 24, basketball is the most frequently practiced sport, with a participation rate of 14%. To align with contemporary sports trends and the enthusiastic demands of the public, universities and relevant sports organizations actively host various basketball events, ranging from interclass, interdepartmental, and intercollegiate leagues under the guidance of the Sports Administration, Ministry of Education. This reflects the prevalence of basketball and related events among the

collegiate community.

School sports serve as the cradle of grassroots sports, and during university years, it is the golden period for students' sports development (Chen & Tsai, 2017). A pertinent study has shown that students' participation in sports during their university years brings numerous benefits in terms of social, intellectual, and physical aspects (Lower-Hoppe et al., 2020). The dual educational experience students gain in both the classroom and on the sports field contributes to personal growth (Osborne et al., 2020). Chalfin et al. (2015) also noted that students' participation in competitive sports during university enhances participation in learning, character development, cognitive development, self-esteem, and graduation rates. This unique set of experiences is challenging to replicate through other educational avenues (Weight et al., 2012).

### **The Central Region University Sports League**

In response to the aforementioned trends, the National Taiwan University of Sport, in alignment with the national sports policy, collaborated with 21 universities in the central region of Taiwan to establish the Central Region University Sports League (CRUSL) in 2015 (Taichung City Government, 2015). The league's primary goal is to promote sports exchanges among institutions in the central region, with the hope that athletes can compete and learn from each other. It also takes advantage of the National Taiwan University of Sport's rich history in sports education to serve as a pioneer in promoting sports. By hosting the league events, the CRUSL aims to foster the concept of grassroots sports development, enhance athletic competitiveness, cultivate a collegiate sports culture, promote the Olympic spirit, and set examples as sports role models (Central Region University Sports League, 2019).

The league's inaugural event, the Central Region University Sports League Basketball Tournament (CRUSLBT), was organized with the collaborative guidance of various entities, including the Sports Administration, Ministry of Education,

Taichung City Government, the Chinese Taipei University Sports Federation, the Chinese Taipei Olympic Committee, and the Central Region Educational Resource Center. Notable features of the tournament include the home and away game system, live broadcasts, comprehensive game statistics, and Olympic education lectures, all of which contribute to the overall quality of the tournament. Through the well-designed competition formats and contents, not only does the tournament enhance its completeness, but it also allows athletes to derive deeper meaning and values from every detail of their participation (National Taiwan University of Sport, 2020).

### **Literature on the Perceived Values of Sporting Events**

Every sporting event serves a purpose and holds significance, but the purpose and significance can vary depending on factors such as the scale, nature, timing, and geographical location of the event. Participants in sporting events include organizers, spectators, and athletes, each of whom perceives and experiences the event differently. Regardless of the roles, understanding the inner feelings of participants is crucial when exploring the perceived values of sporting events (Fang et al., 2012). In light of a review of literature related to the perceived values of sporting events, Hsu (2005) asserted various purposes and meanings of organizing sporting events. These include the educational, sports spirit, and moral aspects of sporting events, the emphasis on fairness and justice, the promotion of sports for the public, the enhancement of athletic skills and the development of sports talents, the fostering of a free and inclusive spirit among the populace, and the promotion of mutual understanding and care among international communities. Huang (2007) analyzed the meaning of sporting event through sports literature (i.e., written materials, documents, and texts related to sports) and proposed that sporting event is multifaceted and profound. It serves as a test and a desire, measures pain with precision, is a stage towards heroism, and is a practical way to self-discovery, offering unique aesthetic experiences.

Other studies have examined the perceived values and experiential process of participating in participatory sporting events with a focus on the participants' perspective. Chang et al. (2017) explored the preparation strategies and experiences of completing one hundred marathons. They found that besides pursuing physical health, runners could attain a sense of self-achievement and self-realization in the process of achieving the goal of completing one hundred marathons. Runners often participated for leisure and interest, with the ultimate goal being to maintain good health and continue running. Chang et al. (2021) studied participants in the Taipei City Badminton Open Tournament and examined the predictive power of event service quality on attractiveness and perceived values. The study measured participants' perceived values across four dimensions, including social value, product value, supplementary value, and quality value. The results showed that event service quality and attractiveness significantly and positively influenced perceived values. Grohs et al. (2020) developed a framework for value co-creation at sporting events using strategic management and practice theory perspectives. They applied this framework to analyze the Big Mountain freeride world qualifier at Hochfügen, highlighting how sporting events can serve as platforms for resource provision, enabling participants (e.g., event organizers, city governments, sponsors, athletes, etc.) to collaboratively create various types of value experiences, including cultural, hedonic, social, status, and economic values.

In the context of student participation in sporting events, Liu and Chuang (2002) conducted a study that involved students from seven domestic universities. The study focused on the development of a scale to assess goal identification tendencies, factors influencing participation, and the level of involvement in the school sports days among university students. They found that students' goal identification tendencies primarily consisted of factors related to personal achievements, educational functions, and campus unity and interaction. Chen and Lin (2017) investigated the potential learning experiences of high school students participating in a school sports day. The

study found that participation in the sports day helped students showcase their skills, appreciate sports, undergo mindset shifts, build peer relationships, and develop social skills. Chen and Chien (2008) conducted in-depth interviews with students, teachers, and coaches who had participated in or organized the National Collegiate Game to construct the core values of the game. The results revealed that organizing the National Collegiate Game encompassed educational, competitive, promotional, and business-related purposes. The values of organizing were categorized into purposive values and instrumental values. Purposive values included bearing responsibility and mission, pursuing self-fulfillment, experiencing life, and seeking pleasure, while instrumental values included gaining competition experience, validating achievements and adjusting training methods, socializing and maintaining emotional connections, enhancing event or sports identity, and serving as a tool for exchanging benefits. MacLean and Hamm (2008) investigated and compared the values associated with sport participation among students from different competitive groups as well as across different age groups and gender. The results revealed 18 values (i.e., being fair, companionship, compassion, conformity, conscientiousness, contract maintenance, enjoyment, good game, health/fitness, obedience, personal achievement, public image, self-actualization, showing skill, sportsmanship, team cohesion, tolerance, and winning). Additionally, few differences were identified between participation groups, age groups, and gender. Chang (2020) used narrative analysis to explore the perceptions and event values of participants in the CRUSLBT. The study found that the tournament imbued participants with substantial values in terms of education, growth, heritage, fairness, social interaction, and promotion. Olympic education was also evident throughout the event, allowing participants to learn and appreciate unconsciously. Foster and Lally (2021) conducted interviews with 23 former NCAA Division I athletes from 16 countries and 8 sports to investigate how international student-athletes perceived their NCAA experience. The study revealed three primary themes, including thinking globally, developing and applying life skills, and prioritizing sport careers over non-sport careers.

## Needs for the Study

Through the review of the aforementioned literature, it is evident that engagement in sporting events allows for the acquisition of diverse value perceptions. Prior studies have extensively discussed the purposes and meanings of organizing sports competitions. Additionally, research from the perspective of participants has shed light on the experiential values of engaging in mass sporting events, and valuable insights have been gleaned regarding the perceived values of sporting event participation among student populations. The researchers have been involved in the promotion of the CRUSL for several years. Through the involvement, the researchers have come to appreciate the importance of the perceived values of sporting events for participating athletes. This study was built upon the previous investigations regarding the values that students gained from participating in sporting events, and specifically delved into the CRUSLBT, the only intercollegiate basketball tournament in Taiwan with the home and away game feature. In particular, this study aimed to analyze athletes' perceptions of the values derived from their participation in the CRUSLBT using a quantitative approach. Subsequently, the Value-Attitude-Behavior (VAB) model proposed by Homer and Kahle (1988) was employed as the theoretical basis to assess the relationship between the perceived values of tournament participation and athletes' future participation intentions. The specific purposes of this study were as follows:

1. To develop the Perceived Values Scale for the Central Region University Sports League Event.
2. To examine the reliability and validity of the newly-developed perceived values scale.
3. To investigate potential differences in the perceived values of the CRUSLBT among participants with various demographic characteristics and participation behaviors, including year of school, previous participation in the tournament, number of seasons participated, starting player status, and average playing time.

4. To assess the predictive power of the perceived values of the tournament on participants' intentions for future participation.

## *Methods*

### **Participants**

The participants were athletes who registered for the general division of the 6th CRUSLBT in 2020. The general division of the tournament encompassed 9 universities, including National Taiwan University of Sport, Chaoyang University of Technology, Hungkuang University, National Chi Nan University, Providence University, National Taichung University of Science and Technology, Overseas Chinese University, Ling Tung University, and Dayeh University, with a total of 152 registered athletes. According to the competition regulations of the tournament, athletes in the general division are not admitted to their respective universities based on outstanding basketball performance. With the exception of National Taiwan University of Sport, all participating teams represent the general divisions of their respective universities. Among the 96 valid responses collected, 34.4% of the respondents (33 participants) were sophomores, followed by juniors (25 participants, 26%), seniors (including extended studies and graduate students) (22 participants, 22.9%), and freshmen (16 participants, 16.7%). Approximately one-third of the participants (34 participants, 35.4%) were starting players. Regarding average playing time, 28.1% played for less than one quarter (27 participants), followed by approximately one quarter (21 participants, 21.9%), approximately two quarters (20 participants, 20.8%), approximately three quarters (18 participants, 18.8%), and only 10.4% (10 participants) nearly played the entire game. Furthermore, the majority (66 participants, 68.8%) stated that they had previously participated in the tournament; among these, 33.3% (32 participants) had participated in one season, 28.1% (27 participants) had participated in two seasons, and 7.3% (7 participants) had participated in three seasons.

## **Instruments**

This study employed the survey research methodology, and the primary research instrument was the “Perceived Values Scale for the Central Region University Sports League Event” developed by the researchers. This scale was designed based on the qualitative findings of Chang (2020) and conceptually comprised of six aspects, including education, growth, heritage, fairness, social interaction, and promotion, with a total of 24 items. Responses were recorded using the Likert scale ranging from “strongly disagree” (1 point) to “strongly agree” (5 points). Higher scores indicated higher levels of perceived value for participants. To ensure content validity, the scale was reviewed by three experts, including two professors of sport management and one professor of sport psychology. After multiple rounds of discussions, consensus was achieved, leading to the formulation of the draft scale. In addition to the perceived values scale, the survey encompassed demographic information (i.e., year of school), participation behaviors (i.e., previous participation in the tournament, number of seasons participated, starting player status, and average playing time), as well as items addressing future participation intentions. The objective was to comprehensively understand participants’ demographic characteristics, participation behaviors, and their intentions for future involvement.

## **Procedure**

The data collection for this study took place from December 21, 2020 (one month after the completion of the tournament) to January 15, 2021, using Google Forms. Initially, the researchers contacted the league’s administration office and team captains to inquire if they were willing to assist in disseminating the survey. Once consent was obtained from the team captains, the survey link was sent to them via the Line communication app, utilizing a snowball sampling method. Team captains were then requested to forward the survey link to their team members. Notably, the messages sent to team captains included detailed instructions for completing the survey

and clearly explained the research's purpose and content. It also assured participants of the anonymity and confidentiality of their responses. Besides, there were no right or wrong answers and the results were solely for academic purposes. Two follow-up reminders were sent on the second week (December 28, 2020) and third week (January 6, 2021) after the initial dissemination to enhance the response rate. The survey link was closed four weeks later (January 15, 2021). After data screening, a total of 96 valid responses were obtained, resulting in an effective response rate of 63.16%. These responses were coded and used in the subsequent analysis.

### **Data Analysis**

The statistical analysis techniques used in this study involved principal component analysis (PCA), Cronbach's alpha internal consistency analysis, *t*-test, one-way analysis of variance (ANOVA), and multiple regression analysis. PCA was performed to explore the factor structure for the newly-developed perceived values scale. Promax rotation, an orthogonal rotation technique, was utilized to improve the interpretability of the factor solution. Estimates of Cronbach's alpha were utilized to measure the internal consistency of the items comprising each extracted factor. In addition, this study used various demographic and participation behavior variables of the participants (including year of school, previous participation in the tournament, number of seasons participated, starting player status, and average playing time) as independent variables to conduct *t*-test and one-way analysis of variance (ANOVA) on the perceived value dimensions of the scale (dependent variables). If the ANOVA results revealed significance, Tukey's HSD post hoc test was applied to examine the sources of differences. Multiple regression analysis was performed to assess the predictive power of the perceived value dimensions (predictor variables) on participants' intentions for future participation (outcome variable). IBM SPSS for Windows 21 was employed for the above statistical analyses, with the significance level set at  $\alpha = .05$ .

## *Results*

### **Scale Validity Analysis**

PCA was performed to explore the factor structure for the perceived values scale. Prior to running PCA, we assessed the Kaiser-Meyer-Olkin (KMO) sampling adequacy and conducted Bartlett's test of sphericity to ensure that the sample data were appropriate for factor analysis. The analysis results indicated a high KMO sampling adequacy value of .87 and a significant result in Bartlett's test of sphericity ( $\chi^2=2163.17, p < .05$ ), indicating the suitability of the sample data for factor analysis.

PCA with promax rotation revealed the extraction of three factors (the first three factors had eigenvalues greater than 1) with a total of 81% variance explained. After examining the pattern matrix, all three factors had at least two items with salient loadings exceeding .50 and no substantial cross loadings (.32 or greater) (Hair et al., 2019). Based on the loaded items and the original factor blueprint, these three factors were named as developmental value (comprising the growth, social interaction, and fairness aspects in the factor blueprint), educational value, and transmission value (encompassing the heritage and promotion aspects in the factor blueprint). Item 8 (The ability to adjust mentality to focus on the game despite referee decisions), item 12 (The ability to swiftly adapt mindset in response to changes within the game), item 17 (Participation in the event can increase players' visibility and exposure), and item 24 (Through participating in the event, individuals can experience the tension and exhilaration inherent in competitions) were eliminated from the scale by reason of insufficient loading. Item 9 (Participation in the event serves as a means to refine skills and accumulate experience) and item 23 (Enhancing awareness of the event through promotional efforts) were deleted due to double loadings.

**Table 1**  
*Factor Solution for the Perceived Values Scale*

Items	Developmental	Educational	Transmission
11. Participation in the event contributes to the enhancement of self-confidence.	.93		
10. The ability to identify deficiencies after the game serves to improve one's own capabilities.	.86		
16. Participation in the event facilitates the expansion of interpersonal relationships.	.83		
14. Participation in the event contributes to the advancement of both individual and team performance on the court.	.77		
07. Competing against teams of similar strength can yield a sense of achievement.	.72		
13. Participation in the event can facilitate team communication.	.67		
18. Participation in the event provides increased opportunities for interaction and exchange with players from other schools.	.62		
15. Participation in the event fosters mutual support among teammates.	.61		
02. Representing the school in the event is a form of honor.		.96	
03. Participation in the event can cultivate a sense of responsibility and self-discipline.		.93	
01. When the team achieves commendable results, it adds prestige to the school.		.76	
04. Participation in the event trains me to maintain faith and progress toward goals.		.73	
06. Participation in the event can foster a positive attitude in considering the value of both oneself and the team.		.70	
05. Cultivating the spirit of being a sportsman who remains humble in victory and resilient in defeat.		.58	
21. Participation in the event allows one to acquire experiences necessary for future integration into society.			.96
19. The networks established through participation in the event contribute to future career development.			.94
20. Participation in the event aids in the transmission of on-court experiences.			.75
22. Through event promotion, the lively atmosphere and educational significance of the game are disseminated.			.55
Eigenvalues	11.79	1.64	1.15
Variance explained	65.49%	9.13%	6.38%
Cumulative variance explained	65.49%	74.62%	81.00%

Note: Factor loadings lower than .50 were suppressed.

**Table 2**  
*Intercorrelations among the Emerged Factors*

	Developmental	Educational	Transmission
Developmental	-	.72**	.58**
Educational		-	.60**
Transmission			-

Note: \*\*  $p < .01$

### Scale Reliability Analysis

Estimates of Cronbach's alpha were utilized to measure the internal consistency of the extracted factors. In accordance with the "coefficient alpha equal to or greater than .70" criterion (DeVellis, 1991), the internal consistency was excellent for all three extracted factors, having Cronbach's alpha estimates of .95 (developmental value), .95 (educational value), and .92 (transmission value). Notably, the inter-item correlations for each factor were all above .40, and deleting any item did not improve the Cronbach's alpha values. Following reliability and validity examinations, the scale consisted of three factors with a total of 18 items remaining.

### Difference Testing

The results of  $t$ -tests revealed significant differences in perceived developmental value and transmission value based on previous participation in the tournament. Upon examining the means, participants with previous participation perceived higher developmental value and transmission value than rookie participants. Furthermore, whether a participant was a starting player demonstrated significant differences in developmental, educational, and transmission values, with starting players scoring higher in all three perceived value dimensions.

**Table 3**  
*Results of t-tests*

IVs	DVs	Groups	Mean	SD	t	p
Previous participation	Developmental	Yes	4.06	0.47	2.76**	< .01
		No	3.74	0.63		
	Educational	Yes	4.03	0.56	1.72	.09
		No	3.81	0.69		
	Transmission	Yes	3.91	0.54	2.05*	.04
		No	3.63	0.76		
Starting player status	Developmental	Yes	4.22	0.45	3.58**	< .01
		No	3.82	0.55		
	Educational	Yes	4.15	0.54	2.26*	.03
		No	3.86	0.62		
	Transmission	Yes	4.07	0.55	2.97**	< .01
		No	3.69	0.63		

Note: \*  $p < .05$  ; \*\*  $p < .01$

The results of one-way ANOVA showed a significant difference in developmental value among different years of school. Tukey's HSD post hoc comparison further revealed that junior as well as senior and above participants perceived higher developmental value compared to freshman participants. Additionally, the number of seasons participated did not show significant differences in perceived developmental, educational, or transmission values. Similarly, different levels of average playing time did not yield significant differences in these three perceived value dimensions.

**Table 4**  
*Results of ANOVAs*

IVs	DVs	Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Post hoc
Year of school	Developmental	Between	2.77	3	0.92	3.31*	(3) > (1) (4) > (1)
		Within	25.64	92	0.28		
		Total	28.41	95			
	Educational	Between	2.71	3	0.90	2.57	
		Within	32.32	92	0.35		
		Total	35.03	95			
	Transmission	Between	2.52	3	0.84	2.20	
		Within	35.24	92	0.38		
		Total	37.76	95			
Number of seasons participated	Developmental	Between	0.36	2	0.18	0.79	
		Within	14.25	63	0.23		
		Total	14.61	65			
	Educational	Between	1.14	2	0.57	1.89	
		Within	18.99	63	0.30		
		Total	20.13	65			
	Transmission	Between	0.20	2	0.10	0.33	
		Within	18.99	63	0.30		
		Total	19.19	65			
Average playing time	Developmental	Between	2.06	4	0.52	1.78	
		Within	26.35	91	0.29		
		Total	28.41	95			
	Educational	Between	1.76	4	0.44	1.20	
		Within	33.27	91	0.37		
		Total	35.03	95			
	Transmission	Between	0.72	4	0.18	0.44	
		Within	37.05	91	0.41		
		Total	37.77	95			

Note: (1) freshman; (2) sophomore; (3) junior; (4) senior and above.

\*  $p < .05$

## Multiple Regression Analysis

To assess the shared influence among predictor variables, the Variance Inflation Factors (VIFs) were calculated. All VIF values were below 5, with the highest being 3.38, indicating that multicollinearity was not a significant concern in the model (Cohen et al., 2014). The results of multiple regression analysis indicated that the re-

gression model constructed from developmental, educational, and transmission values significantly predicted future participation intentions [ $F(3, 95)=15.11, p < .01$ ], and explained 33% of the variance in future participation intentions ( $R^2=.33$ ), reaching a large effect size according to Cohen et al.'s standards. The regression coefficient examination further revealed that only developmental value was a significant predictor ( $t=4.38, p < .01$ ) with a standardized coefficient of .65 ( $\beta=.65$ ).

**Table 5**  
*Results of Multiple Regression Analysis*

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	9.46	3	3.15	15.11**	< .01
Residual	19.20	92	0.21		
Total	28.66	95			

Note: \*\*  $p < .01$

**Table 6**  
*Results of Regression Coefficient Examination*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	VIF
(Constant)	1.98	0.35		5.62**	< .01	
Developmental	0.65	0.15	.65	4.38**	< .01	2.97
Educational	0.003	0.14	.004	0.02	.98	3.38
Transmission	-0.11	0.11	-.12	-0.98	.33	2.11

Note: \*\*  $p < .01$

## *Discussion and Recommendations*

### **Discussion**

Whether it is a mega sporting event, a regional competition, or even a school sports day, the organization of various sporting events holds distinctive purposes and significance. Participants undergo a transformative experience during these events, internalizing the values associated with them. Different events have distinct purposes, leading to variations in the values perceived by participants. This study extended the research context of the values acquired by student populations participating in

intercollegiate sporting events. In particular, it employs a quantitative approach to analyze the value perceptions of athletes participating in the CRUSLBT, the only intercollegiate basketball tournament in Taiwan with the home and away game feature. Deriving from the qualitative research by Chang (2020), the researchers developed the Perceived Values Scale for the Central Region University Sports League Event. After creating the survey, it was administered to athletes from nine universities participating in the tournament. Through principal component analysis, three factors were extracted and named as developmental value, educational value, and transmission value, respectively. In addition, the results of Cronbach's Alpha internal consistency analysis indicated that all three extracted factors exhibited excellent internal consistency. These findings demonstrated that the perceived values scale developed in this study possessed sound psychometric properties.

The perceived values scale developed in this study was derived from the qualitative findings of Chang (2020). During the scale development phase, the factor blueprint consisted of six aspects (i.e., education, growth, heritage, fairness, social interaction, and promotion). Three factors were extracted through factor analysis. Among these factors, the developmental factor comprised the growth, social interaction, and fairness aspects. It encompassed the notion that "participation in the tournament contributes to the advancement of both individual and team performance on the court, fosters team communication and mutual support among teammates, enhances self-confidence as skills improve, and provides a sense of achievement." These contents align with existing research findings, emphasizing that participation in sporting events has been demonstrated to improve athletic skills and foster mutual understanding and care among participants (Hsu, 2005). Student participation in sports assists in building peer relationships and developing social skills (Chen & Lin, 2017). Engagement in sporting events enables individuals to cultivate experiences in interpersonal interaction (Liu & Chuang, 2002), while also providing opportunities to acquire valuable experience, develop skills, and access learning opportunities,

ultimately contributing to the enhancement of self-worth (Chen & Chien, 2008). Moreover, involvement in competitive events not only assists individuals in achieving their goals but also fosters a sense of self-achievement (Chang et al., 2017). Sporting events can also function as a platform for developing social networks, offering participants from various backgrounds opportunities to connect, recognize, and interact with one another (Chang et al., 2021), thereby creating reputational and societal value for the participants (Grohs et al., 2020). Notably, the athletic experience enables student-athletes to cultivate life skills useful during their college years and beyond, while also fostering the creation of a social network of contacts (Foster & Lally, 2021). The educational factor reflected the education aspect, entailing the idea that “besides pursuing rankings to honor the school, participants learn to cultivate self-discipline and responsibility, maintain a positive attitude toward themselves and the team, remain humble in victory and resilient in defeat, and uphold faith while striving toward their goals.” These contents resonate with literature that emphasizes the educational and sportsmanship aspects of sporting events (Hsu, 2005) and the educational value in promoting physical health (Liu & Chuang, 2002), as well as the cultivation of sports ethics and morals (Chen & Chien, 2008). The transmission factor addressed the heritage and promotion aspects, involving “participation in the tournament facilitates the transmission of on-court experiences, the acquisition of relevant experiences for future integration into society, and the contribution to future career development through established networks. Additionally, publicity has the potential to enhance the lively atmosphere and educational significance of the tournament.” The contents reflect relevant research findings, indicating that sporting events contribute to promoting sports activities and enhancing the sports culture (Hsu, 2005), while also serving the purposive value of transmitting mission and responsibility (Chen & Chien, 2008). In terms of career development, the student-athlete experience provides exceptional preparation for careers in the sport industry (Foster & Lally, 2021).

After developing the scale, this study examined the potential differences in perceived values among participants with different demographic characteristics and participation behaviors in the tournament. Moreover, it assessed the predictive power of perceived values on participants' intentions for future participation. The results indicated that higher-grade participants perceived higher developmental value from participating in the tournament. This aligns with the previous finding that older participants (26+) tend to rate the value of self-actualization (i.e., "I feel good when playing") higher than younger participants (14-17) in terms of sport participation (MacLean & Hamm, 2008). Additionally, those with previous participation exhibited greater awareness of the developmental and transmission values, while starting players demonstrated heightened perceptions of developmental, educational, and transmission values. Furthermore, enhancing athletes' perceived developmental value after participation is likely to contribute to improved future participation intentions. As articulated by Homer and Kahle (1988), the VAB model posited an intermediate phase of attitude between values and behavior. This could possibly explain the finding of the regression analysis, where only the developmental value demonstrated significant predictive power for participation intention. These findings are valuable for the league organizing committee in enhancing event management and for other sports organizations engaged in similar events.

### **Practical Recommendations**

The experiences and value perceptions gained by athletes through their participation in the CRUSLBT are undeniably unique learning experiences that extend beyond the confines of university classrooms. To enhance the perceived values of this event, it is essential to incorporate Olympic education and sportsmanship into event planning in a more diverse and flexible manner. This approach can be drawn from Beesley and Chalip's (2011) Sports Event Leverage Model, which provides a framework for generating social benefits. The organizing committee may aim to create a wide

range of diverse themes, expand peripheral activities, and encourage informal social opportunities to cultivate a festive atmosphere. Additionally, organizers can foster social interaction by hosting events with social relevance and establishing informal social occasions (Wang et al., 2014). These outlined strategies and practices set the tournament apart from others, strategically creating a unique market image and niche. This should be the direction in which the organizing committee directs its future efforts.

Due to the unique nature of the tournament's competition formats (e.g., the home and away game system), participating universities are required to provide various resources in terms of campus administration. This includes services such as school bus transportation, venue preparation, event management, scoreboard personnel, and volunteers, all contributing to the successful co-organization of the tournament. These collaborative efforts enable athletes to learn and appreciate the significance inherent in participating in the event. They can thereby gain various values in terms of personal development, as well as educational inspiration and the transmission of experiences.

### **Recommendations for Future Research**

Due to the specific nature of the research population, the sample size for this study was limited to 96 participants, indicating a need for improvement in scale development. Similar sample characteristics are observed in the other regional basketball leagues (e.g., TGB Basketball League, Ding Yu Basketball League). Future research should collect responses from different cohorts to increase sample size and thereby improve the quality of the analysis. Future research endeavors can further this line of research by recruiting athletes from other comparable intercollegiate sporting events, such as the University System of Taipei Tournament and the National Taiwan University System Tournament, to conduct confirmatory factor analysis and composite reliability analysis. This will help cross-validate the scale's psychometric

properties, thereby enhancing its theoretical implications and utility. Following the validation process, the scale can be applied to comprehensive sporting events, such as the National Collegiate Game, to investigate differences in perceived event values among athletes from various sports, disciplines, and performance levels. Additionally, after adapting the scale, it can be distributed to students working as staff and volunteers to gauge the level of value realization among non-athlete participants. Lastly, in the theoretical arguments of the VAB model, it was posited that values may influence behavior both directly and indirectly through attitude (Homer & Kahle, 1988). Future research could incorporate attitudinal variables (e.g., activities, interests, and opinions) into the research framework to examine the mediating effect of attitude in the context of sporting events. The results obtained from further investigations could be immensely beneficial in enhancing the overall significance of sporting events.

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## 參與中區大學運動聯盟賽會知覺價值探析

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### 摘要

目的：本研究擬編製「中區大學運動聯盟賽會價值量表」，檢驗不同人口背景與參賽行為之選手在參與聯盟賽事知覺價值上之差異，探析參與聯盟賽事知覺價值對於選手未來參賽意圖之預測力。方法：本研究以 2020 年中區大學運動聯盟籃球聯賽一般組之參賽選手為研究對象，研究工具包含作者自編之賽會價值量表、人口背景、參賽行為與未來參賽意圖題項，所得資料經主成份分析法、內部一致性分析、t 檢定、單因子變異數分析、多元迴歸分析。結果：研究結果顯示：（一）主成份分析法共萃取出三個因素，根據納入題項係將三個因素分別命名為發展性、教育性、傳遞性；內部一致性分析結果顯示，三個萃取出因素均具有優異的內部一致性。（二）高年級選手知覺參與聯賽所獲得的發展性價值較高，過去曾經參賽者對於發展性與傳遞性價值的體悟較高，先發球員在發展性、教育性和傳遞性價值上均有較高的體悟。（三）由發展性、教育性、傳遞性價值所構成的迴歸模式對於未來參賽意圖具有顯著的預測力，其解釋變異量達 33%；其中發展性價值為顯著的預測變項。結論：研究者根據結果試提建議，以供聯盟籌辦單位未來優化賽務及其他體育運動團體籌辦相關賽事之參據。

**關鍵詞：**校際聯盟、主客場制、奧林匹克教育、運動家典範