



## Design feasibility test instrument for sports tourism domain contextual events based on local wisdom

*Diseño de unas pruebas de viabilidad para eventos contextuales en el ámbito del turismo deportivo basadas en la sabiduría local*

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### Abstract

**Introduction:** Instruments are very important to develop for assessing a sports tourism design. **Objective:** This study aims to formulate a contextual domain sport tourism design assessment instrument with an evaluation approach.

**Methodology:** The total subjects in this study were 236 subjects. Data analysis used Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA).

**Results:** The results showed the CFI value > 0.9, TLI value > 0.9, GFI value > 0.93, SRMR value < 0.7, RMSEA value < 0.08. That way the assessment instrument has suitability, then the loading factor test is carried out. The average loading factor value has a value of more than 0.63, it can be concluded that the test items on each factor have a very good loading factor value. The average variance extracted (AVE) value on each factor is more than 0.5, so the test items on the traditional sports-based sports tourism design feasibility questionnaire are valid. The omega coefficient value on each factor has a value of more than 0.7, so it can be concluded that the statement items have a reliable value. The Cronbach alpha value on each factor is greater than 0.7, so it can be concluded that the statement items on the traditional sports-based sport tourism design feasibility instrument are reliable.

**Discussion:** The instrument for assessing the design of sports tourism in the contextual domain of events consisted of four indicators, namely the basis of organization, supporting factors, products, and promotion.

**Conclusions:** Therefore, it can be concluded that the instrument can be used to assess the feasibility of sports tourism design.

### Keywords

Instrument development; validity; reliability; sports tourism.

### Resumen

**Introducción:** por tanto, es muy importante desarrollar instrumentos para evaluar el diseño de este tipo de turismo.

**Objetivo:** este estudio pretende desarrollar un instrumento de evaluación del diseño del turismo deportivo en el ámbito contextual.

**Metodología:** el total de sujetos de este estudio fue de 236. Para el análisis de los datos se utilizó el análisis factorial exploratorio (AFE) y el análisis factorial confirmatorio (AFC).

**Resultados:** los resultados mostraron un valor CFI > 0,9, un valor TLI > 0,9, un valor GFI > 0,93, un valor SRMR < 0,7 y un valor RMSEA < 0,08. Por tanto, el instrumento de evaluación es adecuado y, a continuación, se realiza la prueba del factor de carga. El valor medio del factor de carga es superior a 0,63, por lo que se puede concluir que los ítems de prueba de cada factor tienen un valor del factor de carga muy bueno. El valor de la varianza media extraída (AVE) en cada factor es superior a 0,5, por lo que los ítems de prueba del cuestionario de viabilidad del diseño del turismo deportivo basado en deportes tradicionales son válidos. El valor del coeficiente omega en cada factor es superior a 0,7, por lo que se puede concluir que los ítems del enunciado son fiables. El valor del alfa de Cronbach en cada factor es superior a 0,7, por lo que puede concluirse que los ítems del enunciado del instrumento de viabilidad del diseño del turismo deportivo basado en el deporte tradicional son fiables.

**Discusión:** el instrumento para evaluar el diseño del turismo deportivo en el ámbito de los eventos constaba de cuatro indicadores: la base de la organización, los factores de apoyo, los productos y la promoción.

**Conclusiones:** por lo tanto, se puede concluir que este instrumento es adecuado para evaluar la viabilidad del diseño del turismo deportivo.

### Palabras clave

Desarrollo de instrumentos; validez y fiabilidad; turismo deportivo.

## Introduction

Instruments in research are an important component that must be considered in order to have compatibility between the methods and results used. In the process of determining the use of research instruments, there are other stages that are no less important, namely the preparation in the formation of instruments. Instrument preparation is very important in the product or design development process to obtain measurement data that can be accounted for (Madureira et al., 2023). The data obtained through measurement will later be used to evaluate the product developed (Csabai et al., 2024). The purpose of preparing the instrument is certainly different, adjusted to the needs and characteristics of the research object (Nurhidayah, 2024). The next stage after determining other objectives is to determine the object assessment indicators which will later be researched or measured. Instrument indicators are determined by factors that can have an influence on the object to be measured (Tsuda et al., 2023). For example, in measuring quality of life, physical aspects, psychological aspects, social relationship aspects, and environmental aspects are factors that affect a person's quality of life (Nurhidayah et al., 2024).

The preparation of research instruments carried out is usually the previous stage of conducting validity and reliability tests (Palevych et al., 2021). Validity testing is carried out to see the suitability of the instrument used to measure the object to be measured. The selection of validity testing techniques is tailored to the research needs. Some validity testing techniques are face validity, content validity, construct validity, field validity and others (Adii et al., 2023; Öztürk et al., 2023; van der Zwaard et al., 2023). Because the validity testing techniques are different, the analysis used is different. In addition to validity testing, reliability testing is also needed in the preparation of instruments. Reliability testing aims to determine the persistence of data resulting from the measurement process, which is carried out using an instrument (Sudijono, 2016). This means that measurements taken by anyone and anywhere on the same object, the measurement results will remain the same (Tayeche et al., 2022). That way the measurement results obtained will be more accurate. Data accuracy is needed in the product development and design process, so it is important to test the validity and reliability of the instrument (Barnett et al., 2023).

Speaking of testing the validity and reliability of research instruments, several recent research studies have begun to focus on developing instrument test research on the development of designs regarding sports tourism (Brovina & Sallaku, 2024). The development of sports tourism design aims to increase tourist visits (Raso & Cherubini, 2023). Various forms of sports tourism that have been developed in major cities are packaged in festivals, competitions, recreational sports, and events (Carvalho et al., 2024; Guan & Zhang, 2024; Tapfuma et al., 2024). Such as the Borobudur marathon, cattle racing and sports tourism based on local wisdom, traditional sports festivals (Guntoro et al., 2023; Kusumawardhana et al., 2021; Somchan et al., 2023). In the process of developing sports tourism, it cannot be separated from the ability of human resources and government policies in the local area (Ma & Su, 2024). The quality of human resources in each region needs to be improved to get creative human resources. With the quality of creative human resources will bring new ideas in developing tourist attractions (Qwatekana & Tshikovhi, 2024).

In addition, the evaluation of sports tourism design is no less important to study. Evaluation of sports tourism design aims to determine the achievement of predetermined targets (Supriyoko et al., 2024). Generally, the evaluation is related to the number of visits, benefits obtained, security, service level, assessment of the packages offered, promotion system, and government support (Martins et al., 2024). Evaluation is carried out by looking at customer satisfaction which can be known using quantitative and qualitative data. The results of the assessment given by visitors will be used as evaluation material to improve the quality of services or packages provided (Weng et al., 2019). This is done as an effort to increase tourist visits wisatawan (Wailmi et al., 2024). Visitor assessment of the services provided is certainly influenced by the instrument prepared. Thus, it is very important to choose an instrument that is in accordance with field conditions to obtain valid data. To assess the design of sports tourism developed, the theory of tourist destination management is used as the basis for instrument development (Buhalis, 2000). Tourism destination management is the application of management in the development, planning and control of tourism destinations involving managers, financial management, risk management, human resource management, and marketing management. In tourism development

planning will still pay attention to the basis of development and products developed in this case sports tourism design. Planning also requires supporting factors such as human resource competencies.

Human resource competencies are included in human resource management, which in developing them still takes into account the needs and interests of all subjects involved, including tourists, partners, local communities, and stakeholders (Papaioannou et al., 2024). An important factor in the assessment of sports tourism is related to the development of the tour packages offered (Guntoro et al., 2024). Tour packages are related to the development of design and planning. Tourism management certainly requires support from many parties, including local communities, academics, government, and parties related to sports tourism (Ma & Su, 2024). Thus, the support factor is important in the evaluation process. Supporting factors are included in the human resource management control section (Tiku & Shimizu, 2020). The development of sports tourism is one of them based on unrest about the utilization that has not been maximized in tourist objects (Kogoya et al., 2022). So that the government compiled a program for the development of tourist attractions through various forms. This relates to the basis of sports tourism development for the benefit of all parties such as stakeholders, local communities, managers, and tourists (Weng et al., 2019). What is no less important in the evaluation process is the promotion system for the tourist services provided (Santos et al., 2023). With good promotional techniques, many people will know, so that tourist visits will increase. This is included in control management. Of course, there are still many things that need to be considered in evaluating the development of sports tourism.

The development of sports tourism should be accompanied by the development of a tourism design assessment instrument that is developed (Prasetyo et al., 2024). The development of a sports tourism model in Jayapura City began to be developed with a traditional sports approach. In developing a sports tourism design, feasibility and effectiveness testing is needed. This is done so that the sports tourism design developed has been tested for feasibility and effectiveness before being socialized to the government and local residents. The development of this instrument is important because the design developed has special characteristics that cannot be equated with other countries, namely traditional Papuan sports. With special characteristics, of course, it will affect the assessment indicators. As explained in the first paragraph, in determining research indicators it is necessary to look at the characteristics of the object of research.

## Method

This research is part of the process of developing a special sports tourism design in one of the regions in Indonesia. In the process of developing a tourism design, it is necessary to have an instrument to assess the feasibility of the developed design. Therefore, the purpose of this research is to continue the process of developing an assessment instrument for the design of sports tourism contextual domain events based on local wisdom with an evaluation approach.

### *Participants*

Since the design developed is specific to a region in Indonesia, namely Jayapura City, the subjects participating in this study are visitors who visit tourist attractions consisting of 5 locations. The criteria for subjects in this study are tourists who come from the area of origin of the tourist attraction and outside the region, including foreign visitors who visit the selected tourist attraction. The age of tourists who can be sampled is at least 18 years old. Tourists are willing to receive explanations from the research team and are willing to contribute as subjects without coercion. Data collection was carried out for 1 month, considering that the selected tourist attraction was still low on visitors. The total subjects in this study were 236 subjects, 113 subjects were used for Exploratory Factor Analysis (EFA) analysis and 123 subjects were used in Confirmatory Factor Analysis (CFA) analysis. The technique of determining the subjects in the study using incidental sampling. The separation of subjects is carried out based on the provisions of instrument testing, where in the initial test, namely EFA, one of which aims to determine the factors that are formed in the instrument developed. After all the instrument items that have been distributed in each factor are declared suitable, the instrument items are then tested again to see the construct validity and reliability in CFA testing. Subjects who have become

respondents in EFA testing cannot be used as subjects in CFA testing, this is because the two tests are carried out separately.

### **Procedure**

The instrument development procedure begins with a questionnaire to subjects directly and indirectly using google form. After all subjects filled out the assessment questionnaire, the researcher conducted an EFA analysis. EFA analysis to group statement items into several factors. When the factor loading value of a statement item is greater than one factor that has been determined and is included in the factor group, the statement item can be grouped into that factor. Questionnaires that have been grouped according to factors or variables are then distributed again with different subjects. The data obtained from distributing the second questionnaire was used for CFA analysis and reliability testing.

### *Instrument*

This research uses a draft instrument developed previously with experts. In the previous stage, researchers compiled statement items based on theories related to sports tourism and local wisdom of the Papua region. After being compiled, a draft instrument was created which will be discussed with experts through Focuss Group Discussion (FGD). The FGD involved several experts, including Papuan anthropologists, Papuan traditional leaders, sports academics, event organizing experts, cultural experts, and the government. FGDs were conducted to obtain content validity of the draft instrument. The number of initial statement items was 27 after being reviewed with experts through FGDs, simplified to 19 statement items that already had content validity. 8 items are failed because the Aiken-v value is lower than 0.4, where the value is invalid. So the item is declared invalid. These 19 statement items were then tested again through factor analysis in this study. The instrument indicators consist of Basic organizational, supporting, product, and promotion with a total of 19 statement items. The rating scale uses a linkert scale, namely very good, good, moderate, and less.

### **Data analysis**

The data analysis used in this study is using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). EFA analysis is carried out because researchers do not have an initial theory in determining the statement items made into variables or factors. So that EFA testing is carried out to group indicators into several factors. The EFA test measures are 1) if the Kaiser Meyer Olkin Measure of Sampling Adequacy value is  $> 0.5$ , factor analysis can be carried out, 2) if the Anti Correlation value is  $> 0.5$ , it is concluded that the Measasure of Sampling Adequacy assumption is met, and 3) if the value of rotation of matrix components is  $> 0.55$  and clusters in one factor, it can be concluded that the statement items are in accordance with each factor and can proceed to CFA testing.

CFA analysis is used to determine whether indicators that have been grouped based on their latent variables (constructs) are consistent in their constructs. The measures used in CFA are measures of model fit with data (fit index) consisting of chi-square ( $\chi^2$ ), degrees of freedom (df), comparative fit index (CFI), Tucker-Lewis index (TLI), Goodness Fit Index (GFI), standardized root mean residual (SRMR), root mean square error of approximation (RMSEA) (Putra, Kurdi, et al., 2024a; Putra, Sutoro, et al., 2024). The size of the chi-square value is statistically significant ( $p < 0.05$ ), CFI and TLI values  $> .90$ , GFI values  $\geq .93$ , SRMR values  $\leq .07$ , and RMSEA scores  $\leq .08$ . After the instrument is suitable, factor loading ( $\lambda$ ) testing is continued. Factor loading criteria refer to Comrey & Lee (1992) (i.e.,  $> .71$  = excellent;  $> .63$  = very good;  $> .55$  = good;  $> .45$  = fair;  $< .32$  = poor). Furthermore, validity testing is done by looking at the Average variance extracted (AVE) value. If the AVE value is  $> 0.5$ , the instrument is declared valid. Furthermore, reliability testing is done by looking at the Cronbach's alpha value and the omega coefficient value ( $\omega$ ). If the omega coefficient ( $\omega$ ) and Cornbach's alpha  $> 0.70$ , the instrument is declared reliable. EFA analysis was carried out with the SPSS application, CFA analysis and reliability testing were carried out with the JASP application.

## Results

### EFA Analysis

In instrument development, validity and reliability tests are started by conducting EFA tests. Before conducting EFA testing, statement items need to be tested for feasibility using the Kaiser Meyer Olkin Measure of Sampling Adequacy (KMO-MSA) test and Bartlett's test. The KMO-MSA value that is continued is more than 0.7 ( $>0.7$ ) and the Bartlett's test value is smaller than 0.005. Based on table 1, it is found that the KMO-MSA value is 0.846, this value indicates the adequacy of correlation for factor analysis. For the Bartlett's test value 3527.601 with a p value of 0.001, meaning that the p value is less than 0.005. That way the Bartlett's test value strengthens the KMO-SA value and fulfills the requirements of factor analysis testing.

Table 1. Result of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) and Bartlett's test

KMO-MSA	Bartlett's test	df	p-value
0.846	3527.601	171.000	0,001

The next step is to conduct factor analysis (EFA). Based on table 2, the first factor analysis results are known, namely the eigenvalues value consisting of four factors where the eigenvalues value  $> 1$ . The eigenvalues value must be more than 1 to be considered valid and can be used as a formed factor. That way the four factors can explain the design of local wisdom sports tourism by 78.20%. The first factor is 57.8%, the second factor is 10.5%, the third factor is 6.1%, and the fourth factor is 3.8%.

Table 2. Characteristic factor

	Unrotated solution			Rotated solution	
	Eigenvalues	Variance (%)	Cumulative (%)	Variance (%)	Cumulative (%)
Factor 1	11.141	57,8%	68,3%	34,8%	34,8%
Factor 2	2.170	10,5%	74,4%	17,8%	52,6%
Factor 3	1.311	6,1%	78,2%	16,4%	69%
Factor 4	1.140	3,8%	68,3%	9,2%	78,2%

Next, analyze the factor rotation to find out the items that are included in each factor that has been formed. The results of the factor rotation analysis in table 3 show that factor 1 contains of 8 items, namely item numbers 1, 4, 5, 10, 11, 12, 13, and 15 with factor loading values between 0.769 to 0.982. The statement items included in this group describe indicators related to support, so factor 1 is called supporting. Factor 2 contains 4 items, namely item numbers 6, 9, 16, and 17 with factor loading values between 0.728 to 0.948. The statement items included in this group describe indicators related to the details of the design developed, so factor 2 is called product. Factor 3 contains 3 items, namely item numbers 3, 18, and 19 with factor loading values between 0.822 to 0.988. The statement items included in the group describe indicators related to the basis on which sports tourism design is developed, so factor 3 is called basic. Factor 4 contains 4 items, namely item numbers 2, 7, 8, and 14 with factor loading values between 0.453 to 0.885. The statement items included in the group describe indicators related to how to promote sports tourism design, so factor 4 is called promotion. The rotation of matrix components will be presented in table 3 below:

Table 3. Rotation of matrix components

No Item	Statement	Component 1 Supporting	Component 2 Product	Component 3 Basic	Component 4 Promotion
1	Organizers of sports tourism activities have appropriate competencies	0.982			
4	Organizers of sports tourism activities have a structured performance	0.968			
5	Source of funds for sports tourism activities can support implementation.	0.936			
10	Participants of sports tourism activities have a good understanding	0.921			
11	Attractions have an attraction for sports tourism activities	0.870			
12	Attractions are suitable for sports activities	0.865			

13	Facilities and infrastructure meet the standards of sports tourism activities	0.842	
15	Travel to the location of the activity is safe and easily accessible	0.769	
6	Modification of the implementation of sports tourism activities does not leave the original elements of the sport		0.948
9	Sports activities offered have innovation		0.945
16	Sports activities offered are economical		0.863
17	Implementation of sports tourism activities in accordance with predetermined provisions		0.728
3	The existence of government policies on the regulation of sports tourism		0.988
18	The aims and objectives of sport tourism activities that are designed in accordance with government policies		0.979
19	The target of sports tourism activities designed in accordance with government policies		0.822
2	The community has a high interest in participating in sports tourism activities		0.885
7	People have the desire to return to visit and participate		0.535
8	The publication media used both print and electronic are following the needs		0.534
14	The content of publication activities can attract the attention of the community to participate		0.453

The next stage is to test if each factor formed can measure the same construct. This analysis is done by correlating scores between factors and factor scores with total scores. The results of the correlation between factors (table 4) show that the supporting, product, basic, and promotion factors have a good correlation value in measuring latent variables (local wisdom sports tourism design). The next step is to conduct CFA analysis.

Table 4. Correlation between factors

	Supporting	Product	Basic	Promotion
Supporting	-	0.540	0.630	0.625
Product	0.540	-	0.557	0.592
Basic	0.630	0.557	-	0.598
Promotion	0.625	0.592	0.598	-

Figure 1. Path Diagram

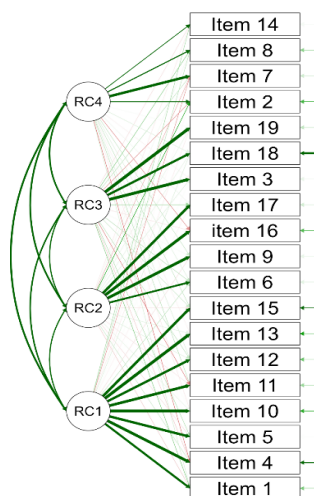


Figure 1 is a path diagram. Based on this figure, it illustrates the relationship between items and latent variables. From the figure it can be seen that there are four diagrams, namely RC 1 (factor 1), RC2 (factor 2), RC3 (factor 3), and RC4 (factor 4). From the picture there are also thick and thin arrow lines, the

thicker the line the stronger the relationship with the item. the results of this path diagram illustrate the results of the rotation of matrix components in table 3.

**CFA Analysis**

Based on the results of the the chi square value calculated is 183.485 and the chi square table value at df 146 is 175.197. This means that the calculated chisquare value > from the table chi square value, so it can be concluded that it is significant. Another parameter that can be used as a parameter is the fit index value. The CFI value on the instrument model has a value of more than 0.90 (CFI>0.9). The TLI value on each factor has a value of more than 0.9 (TLI>0.9). The GFI value on each factor has a value of more than 0.93 (GFI>0.93). The SRMR value in the instrument model has a value smaller or equal to 0.7 (SRMR <0.7). The RMSEA value in the instrument model is smaller or equal to 0.08 (RMSEA <0.08). That way the assessment instrument has suitability, then test the loading factor.

Table 5. Summary of fit indices for the instrument

Factor	$\chi^2$	df	p	CFI	TLI	GFI	SRMR	RMSEA
all	183.458	146	0.019	0.985	0.982	0.932	0.051	0.046

Note.  $\chi^2$  = chi-square; df= degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; GFI = Goodness Fit Index; SRMR = standardized root mean residual; RMSEA = root mean square error of approximation.

Table 6. Standardized loading factors and residual variances of instrument

Factor	Item	( $\lambda$ )	( $\theta$ )
Factor 1	1	0.637	0.067
	4	0.635	0.069
	5	0.660	0.071
	10	0.673	0.081
	11	0.734	0.072
	12	0.683	0.075
	13	0.716	0.083
Factor 2	15	0.732	0.079
	6	0.982	0.066
	9	0.979	0.070
	16	0.957	0.062
Factor 3	17	0.954	0.074
	3	0.936	0.061
	18	0.904	0.068
Factor 4	19	0.978	0.073
	2	0.657	0.082
	7	0.762	0.077
	8	0.724	0.067
	14	0.684	0.067

Note: Loading factors ( $\lambda$ ), Residual Variances ( $\theta$ )

Table 6 shows loading factors and residual variances. The average value of loading factors on each factor has a value of more than 0.63, it can be concluded that the test items on each factor have a very good factor loading value. Three items, namely (item 3, item 9 and item 15) have a factor loading value of more than 0.55, it can be concluded that the item has a good factor loading value. The factor loading illustration can be seen in the model plot in Figure 2. After the factor loading is good, validity and reliability analysis is carried out.

Figure 2. Model plot

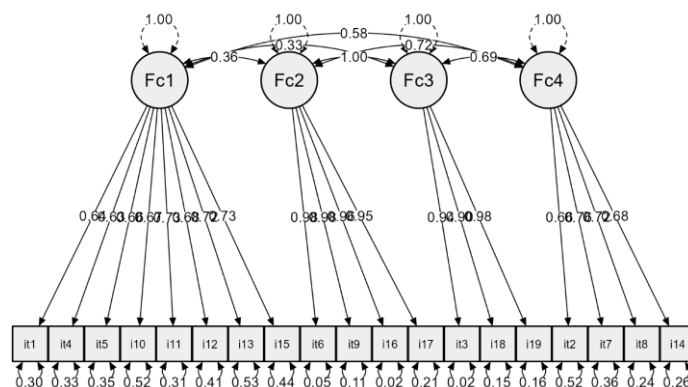


Table 7. Results of validity and reliability analysis on instrument

Factor	AVE	$\omega$	$\alpha$
Factor 1	0.541	0.903	0.904
Factor 2	0.905	0.973	0.975
Factor 3	0.888	0.967	0.955
Factor 4	0.592	0.851	0.853

Note: AVW= Average variance extracted (AVE);  $\omega$ = Coefficient;  $\alpha$ = Cronbach Alpha

Based on table 7 above, it is known that the Average variance extracted (AVE) value on each factor is more than 0.5, so the test items on the traditional sports-based sports tourism design feasibility questionnaire are valid. The omega coefficient value on each factor has a value of more than 0.7, so it can be concluded that the statement items have a reliable value. The Cronbach alpha value on each factor is greater than 0.7, so it can be concluded that the statement items on the traditional sports-based sports tourism design feasibility instrument are reliable.

## Discussion

The process of preparing the instrument begins with determining the objectives and continues with determining the assessment indicators (Sudijono, 2016). The preparation of the instrument aims to measure the feasibility of designing a contextual domain sports tourism event based on traditional sports. Based on the results of the EFA analysis, four factors were formed to assess the design of local wisdom-based sports tourism consisting of supporting factors, product factors, basic factors, and promotion factors. Each factor consists of statement items that are in accordance with the results of the factor rotation. In addition, the results of correlation between factors show that the supporting, product, basic, and promotion factors have a good correlation value in measuring latent variables (local wisdom sports tourism design). The instrument was then tested CFA to determine the validity and reliability of the instrument (Putra et al., 2024). In addition, the CFA test is also used to test how well the measured variables can represent constructs or factors that have been previously formed (Putra et al., 2024b). The CFA test is a form of construct validity testing. The CFA test results show that each factor fits and has good validity and reliability values.

Validity is one of the indicators that determine that the instrument is good and suitable for use (Hulka et al., 2023; Nurhidayah, 2024). With a variety of validity testing techniques, researchers can choose validity testing techniques according to their needs (Mardaphi, 2017; Weber et al., 2024). Content validity testing involves several experts, the experts selected are tailored to the instrument developed (Morán-Gómez et al., 2024). If the instrument developed is a sports performance measurement instrument, the experts used in testing the instrument are physical condition experts, sports biomechanics experts, and sports physiology experts (Nurhidayah et al., 2024). The number of experts in validity testing is determined based on the analysis to be used. Analysis using Aiken's  $v$  and CVR uses a minimum of seven experts (Sudijono, 2016).

Validity testing techniques are construct validity, validity based on other variables, and validity (De Souza et al., 2023; Delussu et al., 2014). Each validity testing technique has its own purpose and function and has certain requirements in the testing procedure. So it is very important to know the functions and data needed before having a validity testing technique (Mardaphi, 2017). Not only that, instrument reliability testing also needs to be done to get a good instrument. Reliability testing is carried out after the instrument has been tested for validity (King-Dowling et al., 2024). Reliability testing is done to test whether the instrument used by anyone and at different times will produce the same value (Nurhidayah et al., 2024). When the value is the same, the instrument has good reliability.

Reliability testing can be done with a variety of techniques. Reliability testing techniques are tailored to the needs of the research. The reliability testing techniques include test-retest, internal consistency, parallel aid approach, and inter-rete reliability (Dolo et al., 2023; Grgic et al., 2021). In instruments designed for physical performance, a widely used reliability testing technique is test-retest. This technique is done by testing twice on the same person and at different times (Rhodes et al., 2022). After conducting validity and reliability testing, norm setting needs to be done. Norm setting is done to translate the rough values of the measurement results (Nurhidayah et al., 2024; Senanayake et al., 2023). That way users will know the meaning of the measurements taken. In this study, researchers compiled



norms of measurement results by dividing 4 assessment categories, namely less, medium, good, and very good. Some studies developed norms with 3 categories and 5 categories. The determination of the categories in the norms compiled is adjusted to the measurement needs.

Preparation of the instrument for assessing the feasibility of sports tourism design contextual domain events based on traditional sports and accompanied by measurement norms, the feasibility of the design can be measured by looking at each assessment indicator. That way, the design developed can be seen to what extent the feasibility level is before being implemented. Indicators of the feasibility of a design or product can be known by considering the factors that influence the design or product developed (Higham & Hinch, 2018). Indicators that influence the design of sports tourism can be seen from the material or content aspects of the event that is compiled, the condition of the facilities and infrastructure of the tourist attraction, the safety of activities and the security of access to the tourist attraction, the economy of the designed activity design, the ability of human resources, the usefulness of the design developed, and the possibility of further design development (Erdem & Akin, 2024; Guan & Zhang, 2024). These indicators are some of the factors that can affect the feasibility of a design that is prepared (Dalle Nogare & Scuderi, 2024). This refers to several studies conducted related to the findings that affect sports tourism activities (Nyikana & Tichaawa, 2024; Tapfuma et al., 2024; Wailmi et al., 2024).

That content or design of sports tourism will affect the interest of tourists to visit (Tapfuma et al., 2024; Wang et al., 2024). Designs that are unique and meet today's market have a special attraction for tourists (Liu et al., 2024). The human resources of sports tourism managers also need to be considered. Tenacious and responsible human resources will provide new innovations related to the design of sports tourism developed (Guan & Zhang, 2024; Ríos et al., 2024). In addition, security, facilities and infrastructure available at tourist attractions can also affect the success of the sports tourism design developed. Security issues, bathroom facilities, canteens, gazebos, and road access are also the cause of the lack of visitors to tourist attractions (Tiku & Shimizu, 2020). Security issues are a very calculated thing for tourists to visit tourist attractions. So it is very important for the government and the community around the tourist attraction to ensure the safety of road access to tourist sites and the location of the tourist attraction itself (Martins, Mascarenhas, et al., 2024; pazandeh et al., 2023). In addition, the availability of facilities and infrastructure at tourist attractions is also a consideration for tourists to visit. So that ensuring the fulfillment of standard facilities and infrastructure at each tourist attraction needs to be fulfilled to maximize the available natural resources (Nyikana & Tichaawa, 2024).

The natural beauty available if it can be developed properly, in this context sports tourism will have a good impact on the surrounding community and the government (Guntoro et al., 2024; Ma & Su, 2024). Because sports tourism combines tourist activities with sports activities, the purpose of a tourist visit is not only for recreation, but also to maintain fitness. This concept is widely developed in the form of events, outdoor sports, camps, and outbound (Kogoya et al., 2022; Prasetyo et al., 2024). The concept of sports tourism and supported by adequate facilities will certainly increase local and foreign tourist visits. The increase in tourists can have an impact on the economy of residents around tourist attractions (Qwatekana & Tshikovhi, 2024). In addition, sports tourism activities organized by incorporating regional local wisdom can also be used as an effort to preserve local wisdom. Considering that in modern times like now local wisdom is fading.

## Conclusions

Local wisdom-based tourism sport event design assessment instrument has been developed consisting of four indicators, namely the basis of organization, supporting factors, products, and promotion. The organizing indicators relate to the legal basis of government policies, adjustments to the aims and objectives of the design based on government policies, and targets that are adjusted to government policies. Implementation procedures are related to. Supporting indicators relate to the quality of resources, both human resources and natural resources. Promotion relates to the techniques used to market the sports tourism designs offered. And product indicators are related to public interest in visiting and returning to visit. The entire instrument has strong validity and reliability values. In addition, the assessment instrument is also equipped with norms that serve to interpret the assessment results. Therefore, this instrument can be used to test the feasibility of designing local wisdom-based tourism sports events.



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