ingegneria sismica
International Journal of Earthquake Engineering
Anno XLIII - Num. 1 - 2026

Strategies for Sustainable Development of Non-Heritage Study and Research under the Perspective of Cultural Heritage Protection

Yingying Wang[1,*]

[1] Tourism Management of Zhengzhou Tourism College, Zhengzhou, Henan, 450000, China

SUMMARY: *Based on the theoretical framework of intangible cultural heritage protection, this paper uses the combination of literature review, in-depth interviews, and questionnaire surveys as the method of performing a systematic investigation of the evolution of non-heritage studies and learning in a specific school. The statistical analysis of the survey data will be performed through descriptive statistics, Pearson correlation analysis, and structural equation modeling to come up with actionable strategies that can help promote sustainable development of non-heritage research and learning in the institution. The respondents were highly appreciative of the non-heritage research and learning experience of the school on the whole. Cultural experience aspect had an average of 4.62 meaning that students felt a high level of cultural involvement due to their involvement. Of all the perceived value dimensions that were assessed, educational perceived value scored highest among the respondents and was also discovered to have the most significant impact on student intentions to safeguard and pass down intangible cultural heritage. The evaluation index scores that assess the level of development of the non-heritage research and learning program of the school were between 3.00 and 3.71 points, a value that is lower than what is required by sustainable development in this sphere. To counteract these drawbacks, the research proposes four specific optimization strategies, which relate to school publicity, study facilities, curriculum design, and teacher training, each of them aimed at enhancing the sustainable development of non-heritage research and learning at the school.*

KEYWORDS: *Descriptive Statistics; Correlation Analysis; Structural Equation; Non-heritage Study; Sustainable Development Strategy*

1 Introduction

Intangible cultural heritage, as a representative of a country's cultural connotation and soft power, its inheritance and protection have gradually become an important research topic. At present, many intangible cultural heritage (ICH) projects are still trapped in "museum-style protection", becoming "living fossils" in display Windows rather than "the flavor of daily life". The reason for these phenomena is that ICH protection units have insufficient understanding of the need for "youthful and dynamic" innovation in ICH projects, which restricts the sustainable development of ICH [1-5]. On the one hand, people always label non-heritage skills as “old-fashioned and outdated”. Henan TV “Tang Palace Night Banquet” of the popularity, proved that as long as you find resonance with modern aesthetics, young people will also love traditional culture, “old crafts” can also become “new top stream”. On the other hand, due to the economic environment and policy support and other factors of non-legacy representative inheritors also

*dsb1414@163.com
https://doi.org/10.65102/is2026469
Published: 30 April, 2026

show “aging”, China's Ministry of Culture and Tourism recognized the first five batches of 3068 national non-legacy representative inheritors, most of the non-legacy projects representative inheritors of the age of the older, an average of more than 50 years of age, visible non-genetic inheritance. The shortage of young talents [6-10].

Over the past few years, there has been a significant rise in non-heritage study activities which have proven to be quite active among various communities. Essentially, non-heritage study is an important combination of ancient culture and modern education. It encourages the participants to interact with intangible cultural heritage by practising and experiencing it firsthand, promoting real appreciation and long-term dedication to cultural transmission. Researchers have always observed that a carefully planned non-heritage study program can fulfill two goals at once: helping local populations to better discover and utilize their native cultural assets, and also presenting youth with meaningful, beneficial experiences with non-heritage customs that enhance their feeling of cultural identity[11-15]. In addition, the study tour framework acts as a good mediator, linking museums, schools, social enterprises, and heritage protection units in a cooperative network aimed at cultural exchange, acquiring history knowledge, and mutual responsibility to preserve intangible heritage [16-18]. Since non-heritage study has taken a central position in the overall scheme of socializing heritage protection, the issue of how to maintain its sound and positive growth has become an urgent challenge both to heritage practitioners and project protection agencies.

The article will focus on one school as an example to study the ways to achieve sustainable development of non-heritage learning. In depth interviews combined with structured questionnaires were used to obtain the student views on the non-heritage research and learning activities of the school. The resultant data were thereafter analysed using descriptive statistics and correlation analysis and this allowed the researcher to gain better insight into the current functioning of such activities in the school setting. Based on these results, the article makes several practical suggestions that are supposed to facilitate the sustainability of the non-heritage study program of the school over time and contribute to enhancing the awareness of students of their contribution to the preservation and protection of the intangible cultural heritage.

2 Case studies of non-heritage research under cultural heritage protection

2.1 Research methodology

(1) Literature research method

The present research is based on an extensive literature review of scholarly articles obtained through various academic libraries including works in the areas of cultural heritage conservation, non-heritage studies and development and sustainable development of intangible heritage programs. Instead of using the sources as just background reading material, the study organizes them in a systematic theoretical framework and critically examines them, deriving out of them the conceptual basis and evaluative criteria upon which the next empirical analysis will be built.

(2) In-depth interview method

The method of in-depth interviewing is at the core of qualitative data collection approaches and can be considered one of the major approaches used in the given research. Using the direct conversation with participants, researchers can get subtle information about cognition, attitudes and behavior patterns of people being investigated. It is important to mention that it includes various types of formats, such as structured, semi-structured and quantitative interviews, which are appropriate to use when studying different types of questions and research settings.

(3) Questionnaire Survey Method

Questionnaire survey is among the most popular methods in social science research and continues to be an important instrument of empirical data gathering. The survey tool that was applied in the current research was created based on a synthesis of the results of well-established scholarly sources, the unique properties of non-heritage learning activities, lessons learned in the process of interviewing phase, and the advice of the appropriate experts. The completed questionnaires were administered to the college student respondents who previously participated in non-heritage research activities using a systematic combination of online and face-to-face administration to generate the dataset on which later analysis is based.

(4) Multivariate data analysis method

The questionnaires collected during the survey that were validated were analyzed and processed through the help of SPSS 22.0 and AMOS 24.0 statistical software packages. These processed responses were next subjected to multivariate data analysis techniques so as to evaluate the developmental state of non-heritage study programs in a systematic and rigorous way. The particular analytical methods and their applications are explained in the sections below.

2.2 Key technologies for data analysis

2.2.1 Descriptive statistics

This paper will use two major descriptive statistics measures to describe the distributional characteristics of the data gathered on non-heritage research and learning development, namely, the mean of the sample and the standard deviation of the sample. They are discussed one after another as follows.

(1) The sample mean, commonly expressed as $\bar{X}$, is used to indicate the average level of a set of data distribution and is most often used. The formula is:

$$\bar{X} = \frac{X_1 + X_2 + \cdots + X_n}{n} = \frac{1}{n}\sum_{i=1}^{n} X_i \tag{1}$$

(2) The sample standard deviation, which represents the degree of dispersion of a set of data away from the sample mean. The specific formula is:

$$SD = \sqrt{\frac{\sum_{i=1}^{n}\left(X_i - \mu\right)^2}{n}} \tag{2}$$

2.2.2 Pearson correlation

The most widely used method among the various ways to examine relationships between variables is Pearson's correlation coefficient. In concept, it is a further development of the Euclidean distance as well as a further improvement on the cosine similarity when the information on dimensions is not complete. Its main purpose is to measure the strength of the linear relationship between two variables. The range of Pearson correlation coefficient values lies in the interval $\{-1,1\}$ and has the following mathematical representation:

$$\operatorname{cov}(x, y) = \frac{\sum_{i=1}^{n}\left(x_i - x_e\right)\left(y_i - y_e\right)}{n-1} \tag{3}$$

$$\rho_{x,y} = \frac{\mathrm{cov}(x, y)}{\sigma_x \sigma_y} \tag{4}$$

where x, y are the time series of the two selected reference variables, $\mathrm{cov}(x, y)$ denotes the covariance of the sequence x with the reference sequence y, and x_e, y_e are the means of the x, y series, respectively. i represents the time series, each of which corresponds to an actual value.

2.2.3 Structural equation modeling

Structural equation modeling is divided into two areas of application. One is to provide indirect observation and treatment for latent variables that are difficult to observe directly, which facilitates the next step in the study of latent variables, whose indirect observation is the indicator of the observed variables, which is known as measurement modeling. The second is to study the causality and interrelationships among different variables, which is called structural modeling in structural equation modeling diagrams.

(1) Measurement model

In order to be able to graphically explain the relationship between observed variables and latent variables in the measurement model, equations are used to illustrate them:

$$x = \Lambda_x \xi + \delta \tag{5}$$

$$y = \Lambda_y \eta + \varepsilon \tag{6}$$

where x, y-vector of internally and externally generated observed variables.

Λ_x, Λ_y - Loadings of the inner and outer observed variables on the corresponding latent variables, i.e., the factor loading matrix.

ξ, η - Vector of internally and externally generated latent variables.

δ, ε - Error terms of the internally and externally generated observed variables.

(2) Structural modeling

In order to graphically explain the interrelationships between the latent variables, equations are used for illustration:

$$\eta = B\eta + T\xi + \zeta \tag{7}$$

where η-vector of endogenous latent variables.

B-The structural coefficients that control the relationships between endogenous latent variables in the model.

T-The directional links between exogenous latent variables and endogenous latent variables that they are linked to.

ζ-The residual error terms associated with every endogenous latent variable in the structural equation.

2.3 Study design

2.3.1 Selection of research subjects

The participants that were chosen in this research were college students of a particular institution who have previous involvement in non-heritage study activities. The sample was three levels of academic enrollment, comprising full-time associate degree students, full-time undergraduate students, and full-time postgraduate students, which included the master and doctorate candidates. There was an opportunity to interview all participants, and thus the study could include views of participants across the entire range of higher education training levels present at the institution. The reasons are as follows: college students are more mature psychologically and physiologically than primary and secondary school students, especially in the transition from the closed high school stage to the university stage, they have relatively more time at their disposal, and their vision has gradually shifted from focusing on books to the outside society, with a stronger willingness to be socially responsible. Therefore, improving their willingness to protect heritage is crucial to China's cultural protection program. In addition, there is a great demand for college students to study in the market, and many college students are willing to participate in the study. It can be seen that a focused research on college students' study abroad is very necessary.

2.3.2 Interview outline design

Interview texts are an important source of primary data for qualitative research. This study adopts the semi-structured interview method to obtain the interview text, because the semi-structured interview method can not only ask questions to the interviewees in a targeted way, but also can not be restricted to the outline, and give play to the initiative of both parties to dig out more useful information. This study is based on field research, based on reviewing the literature related to research and learning experience and non-heritage protection, and inviting five experts in related fields for discussion, and finally designing the interview outline for this study. The interviews were conducted with this as the main question, and were further extended according to the interviewees' answers during the interview process, and new research questions were constantly modified and added. The interviews for this study mainly covered the following questions:

(1) Please briefly recall and tell us about the process of experiencing this non-heritage research activity?

(2) What impressed you most in this NRL research activity?

(3) What were your favorite and least favorite aspects of this non-heritage study activity and why?

(4) What was your biggest gain from this non-heritage study activity?

(5) Can you describe your feelings after this study activity on non-heritage?

(6) Has this non-heritage study activity helped you focus on non-heritage culture more generally and become more aware of it?

(7) After taking part in this non-heritage study program, are you more responsible to the conservation of non-heritage? In case of yes, can you come up with certain examples that would demonstrate this shift in attitude or intention?

(8) Can we know your basic information, such as your name, age, education, place of origin, place of study, etc.?

2.3.3 Data collection

This study adopts the method of combining offline and online interviews, and considering the typicality and convenience, this study selects a non-heritage urban area as the case study site for offline interviews. At the same time, taking into account the limitations of the case study site originating from the same region and the problem of the plurality of NRH. At the same time, considering the limitations of the case study area from the same region and the diversification of NRLs, we recruited college students who had recently participated in NRLs to conduct online research. In the end, a total of 30 people were interviewed online and offline, and the length of the interviews was controlled at 20-30 minutes. The whole interview was recorded with the consent of the interviewed college students, and the audio was converted into text after the interviews were finished. After the interviews, the audio was converted into text, and the text was sent to the interviewees for confirmation to ensure accuracy.

3 Research and analysis of the development of non-heritage studies in a school

With the help of a systematic approach to literature review and focused interviews, this research has identified and defined the most evaluative indicators that are applicable when it comes to analyzing the growth of non-heritage study programs at the school level. Specific questionnaires were developed and implemented accordingly. Descriptive statistics as well as any other suitable quantitative methods were used to analyze the gathered survey data, with the overarching aim of generating an accurate and well-substantiated evaluation of the current functioning of non-heritage study within the school. Based on these analytical results, the paper ends up presenting a consistent list of suggestions that would contribute to sustainable and healthy long-term development of such programs.

3.1 Evaluation of the quality of the non-heritage research experience

The main element of the questionnaire that was created to be used in this section is based on assessing the quality of student research and learning experience. The instrument incorporates a total of 37 indicators based on a six dimensional quality evaluation framework including educational experience, cultural experience, entertainment experience, aesthetic experience, escapism experience and socialization experience. Each item was scored in a Likert scale style, whereby the exact scale structure depended on the typology of non-heritage research experience. The questionnaires were collected face-to-face within the allotted fieldwork time. Out of 300 copies, 291 copies were retrieved in good conditions to be analyzed, giving a return rate of 97%. Descriptive statistical analysis is a statistical analysis of data collected from valid samples, usually by analyzing the mean and standard deviation. In this study, the higher the mean value represents that the survey respondents have a higher quality of experience for the dimension, and the smaller the standard deviation represents that the tourists have a more consistent opinion about the quality of experience for the dimension.

The figure 1 shows the descriptive statistics results of each indicator in the non-heritage research experience framework. On all the indicators measured, the mean scores were always above 3.5 which indicates that overall the participants viewed the indicators positively. In the six dimensions, cultural experience had the highest average value of 4.62 whereas educational experience reported the lowest value of 3.59 indicating a considerable difference in the way students valued and evaluated various aspects of their research work. The low scores in the educational experience dimension indicate that the survey respondents are not particularly satisfied with the method of explanation and teaching style of the teachers, the learning and re-

learning of knowledge in the research process. Survey respondents' evaluation of the quality of the cultural experience of the non-heritage study and research was generally high, with the smallest overall standard deviation, indicating that survey respondents unanimously recognized the cultural experience brought by the non-heritage study and research venues, including the cultural atmosphere and the display of crafts. In terms of entertainment experience, the average score of this indicator is 4.24, and survey respondents are satisfied with the degree of digitization of non-heritage venues and the interactive content and form of teaching. In addition, survey respondents' evaluation of the quality of aesthetic experience is relatively low, with an average score value of 3.78 and a larger standard deviation than the other dimensions. It indicates that in this dimension, the survey respondents' views are not unified, which may be related to the survey respondents' own aesthetic style, but most of the survey respondents felt the beauty of culture in the research activities organized by the school. In addition, most of the survey respondents said that the school-organized non-heritage study activities made them forget their worries, and the average score of the quality of the escape experience was 4.08. In terms of social experience, the quality of the survey respondents' experience was evaluated better as a whole, and the average score was second only to the cultural experience, reaching 4.43 points. It indicates that in the non-heritage research and study, the research subjects were able to make new friends, receive gifts from friends and teachers, and get along with their partners happily.

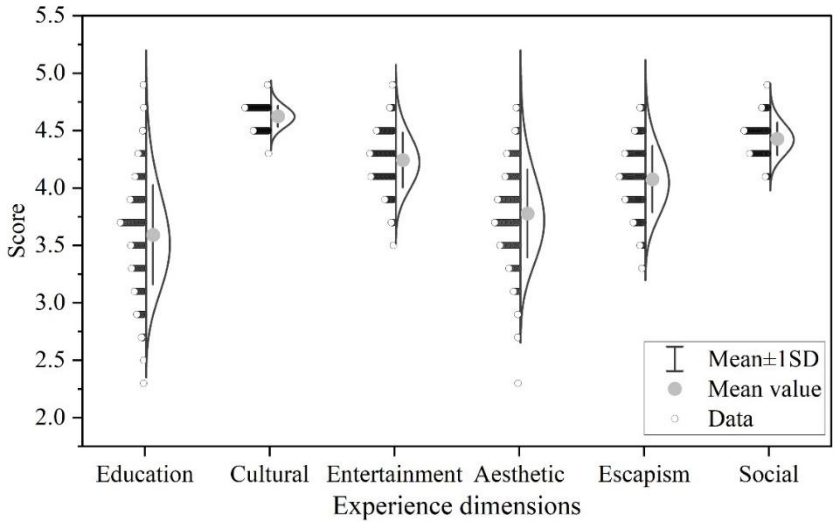

Figure 1: To study the descriptive statistics of each index

In order to test if there are statistically significant correlations among the experiential factors that have been identified and the sustainable development of non-heritage research and learning, this paper will use Pearson correlation analysis as a main instrument of analysis. The analysis is aimed at the six key factors emerging out of the data, that is, education experience, cultural experience, recreation experience, aesthetic experience, escape experience and social experience, and it examines each of these factors in terms of their nature and intensity of relation to the sustainable development of non-heritage research and learning programs. Further judgment is made by the positivity, negativity and size of the derived data: if the data are positive, there is a positive correlation between the factors, and if the data are negative, there is a negative correlation between the factors. In addition, the closer the size of the data is to 1, the greater the correlation.

The correlation analysis findings illustrated in Figure 2 indicate that there is a uniform tendency in all the variables analyzed. The pairwise correlation coefficients between the six

dimensions of experience (educational experience, cultural experience, entertainment experience, aesthetic experience, escapism experience, and social experience) and between each dimension and sustainable development of non-heritage research and learning are all positive and of notable size at the 0.05 significance level. Each of the P-values is less than 0.01, and thus the identified positive correlations in dimensions can be taken as statistically significant and not due to chance. Especially interesting are the correlation coefficients between educational experience and cultural experience and the sustainable development of non-heritage research and learning, which are 0.907 and 0.926 respectively. The numbers are significantly greater than the rest of the four dimensions and indicate the relative importance of educational and cultural experience to the students surveyed in terms of supporting and developing non-heritage research initiatives in schools.

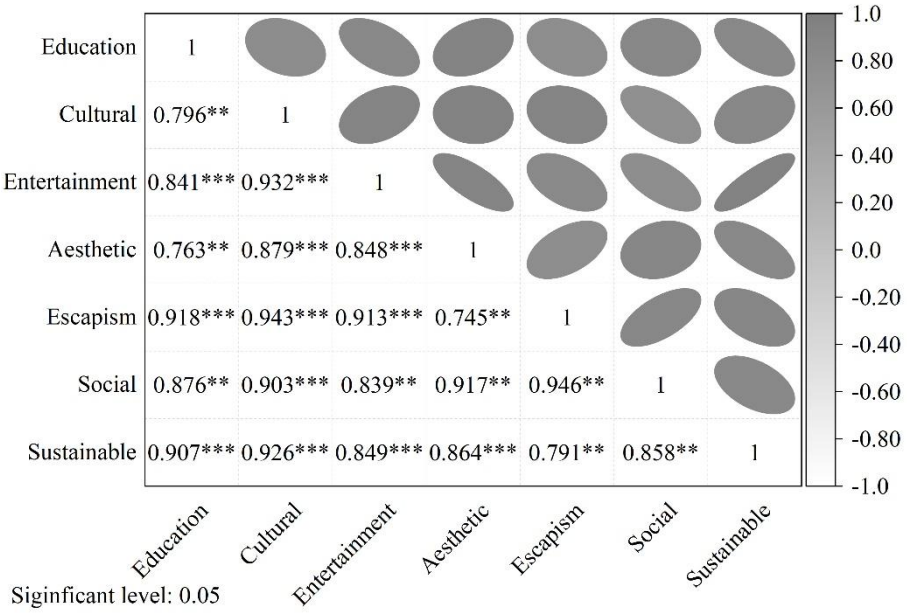

Figure 2: Correlation analysis between variables

3.2 Analysis of Perceived Value and Protection and Transmission Behavior

In addition to the experiential aspects that have been discussed above, this paper also investigated how the perceived value of non-heritage research activities performed by the participants correlates with their stated willingness to preserve and pass on intangible cultural heritage after participating in school-organised programmes. It was given much attention to make sure that the measurement instrument would be theoretically sound and pragmatic to use at the same time. The review and synthesis of available literature helped as the basis wherein five perceived value dimensions were obtained: functional value, social value, educational value, contextual value, and protection and inheritance behavior. They were subsequently operationalized into a tentative set of scale items. The provisional instrument was then critiqued by various research advisors and subject matter experts, and the comments of these experts influenced a sequence of specific revisions. Another pilot survey was done to further improve the wording and structural clarity of its items and it was not until the completion of such an iterative procedure that the final form of the questionnaire was officially taken up to collect the data. A total of 300 questionnaires were issued, excluding the completion of the questionnaire is not completed and fill in the fuzzy lost 20 points, the total number of valid questionnaires recovered total 280, the recovery of the efficiency of the value of 93.3%.

Figure 3 shows the evaluation of survey respondents on the perceived value of their non-heritage study experience and the resulting orientation of heritage protection and transmission. On all five measurements which are functional value, social value, educational value, contextual value and protection and inheritance behavior, the means of scores were all above 4.0 points. Such a trend suggests that the participants had a generally positive view of the total value provided by the non-heritage study activities of the school. The educational value was the dimension that got the highest perceived value rating from respondents having an average of 4.63 points. The result has a distinct practical implication: competent authorities and administrative agencies must use the instructional benefits of the already existing intangible cultural heritage teaching facilities to the fullest extent possible incorporating study tour activities directly into these facilities to create a more diverse range of non-heritage learning opportunities. On the topic of heritage protection and inheritance behavior, respondents averaged 4.41 points. Most reported that engaging in non-heritage study tours had significantly raised their own interest in the issue of intangible cultural heritage. Moreover, most of the respondents were eager to suggest this type of study tour activities to their peers and acquaintances, and intended to actively engage themselves in the promotion, advertising, and further preservation and transmission of intangible cultural heritage.

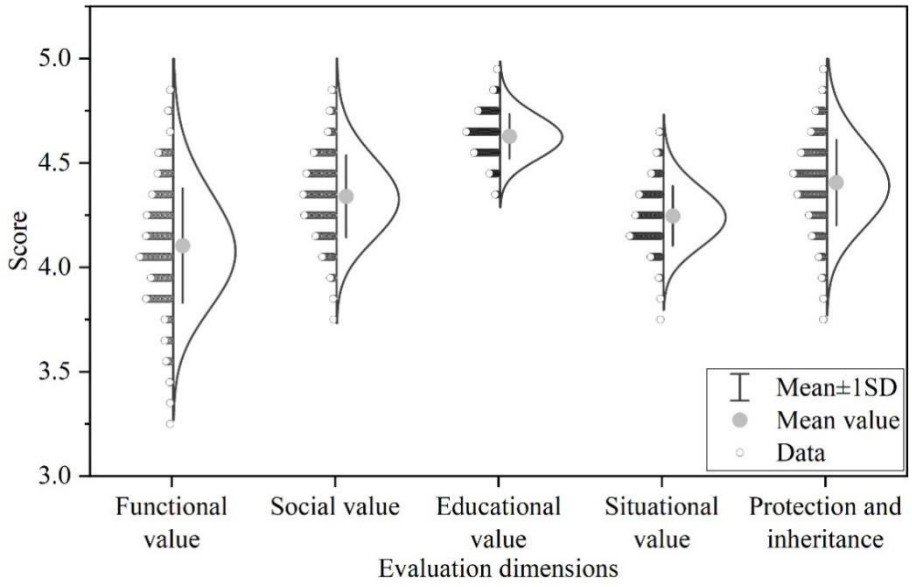

Figure 3: The perceived value and the non-legacy behavior evaluation results

This subsection also uses the AMOS structural equation model to analyze the functional value, social value, educational value, and situational value in the study of NRH, and the correlation between the four value experiences and the willingness to protect the inheritance behavior of the survey respondents. The results of AMOS fitting between the value experience and the willingness to protect and inherit behavior are shown in Table 1. The social value, educational value and situational value have significant and positive influence on the protection and inheritance behavior of the survey users respectively, with coefficients of 0.338, 0.897 and 0.642. Among them, the educational value perception has the greatest influence on non-genetic inheritance and conservation behaviors and passes the 0.01 level of significance test, while the social value perception and the contextual value perception are relatively small, but both pass the 0.05 level of significance test.

Table 1: The value experience is the result of the Amos that protects the will

Value→behavior	Estimate	S.E.	C.R.	p
Functional→Protection	-0.024	0.217	-0.119	0.773
Social→Protection	0.338	0.023	17.249	0.018**
Educational→Protection	0.897	0.046	17.863	0.005***
Situational→Protection	0.642	0.031	19.437	0.025**

*, **, and *** are tests of significance that pass the 0.1, 0.05, and 0.01 levels, respectively.

In addition, the study analyzed the correlation between the value dimensions, and the results of fitting between specific dimensions are shown in Table 2. Functional value perception has an effect on social value perception, educational value perception, and situational education perception, and their fitted values are 0.309, 0.299, and 0.281, respectively, and they are all significant at the 0.01 level. There is an effect of perceived social value on perceived educational value and perceived situational value and their fitted values are 0.315, 0.275 respectively and they are significant at 99% level. Educational value has an effect on situational value perception and its fitted value is 0.241, which passes the test of significance at 0.01 level. Collating the results of the appeal analysis, the functional value has a negative effect on the willingness to protect the inheritance behavior, while the social value, educational value and contextual value have a significant positive effect on the willingness to protect the inheritance behavior.

Table 2: The matching results between dimensions

Value→Value	Estimate	S.E.	C.R.	p
Functional→Social	0.309	0.027	0.084	0.001***
Functional→Educational	0.299	0.032	0.032	0.004***
Functional→Situational	0.281	0.029	0.083	0.007***
Social→Educational	0.315	0.024	0.058	0.009***
Social→Situational	0.275	0.031	0.052	0.003***
Educational→Situational	0.241	0.03	0.087	0.008***

*, **, and *** are tests of significance that pass the 0.1, 0.05, and 0.01 levels, respectively.

3.3 Exploring the extent of development of non-heritage study programs

From the above, it can be seen that students have the highest perception of the educational value in the non-heritage research activities organized by a school. For this reason, this section of the questionnaire set up relevant questions to explore the extent of the development of the non-heritage research curriculum in the school. Through the observation and investigation of 300 survey respondents, the information collected was unified and categorized to serve as a reference for the development of a sustainable development strategy for non-heritage research and study. The specific survey indicators were from four levels, namely, the construction of non-heritage experience facilities, the construction of non-heritage study teachers, the development of non-heritage teaching resources, and the construction of non-heritage experience bases, and were designed using a Likert scale. The current stage of the research saw 300 questionnaires being issued and only 275 of them were received back in a valid format resulting to a recovery rate of 91.67.

The Figure 4 shows the assessments of respondents concerning the general developmental condition of the non-heritage research scheme of the school indicating significant variation in terms of the perceptions of different participants on the current state of the program. Regarding particular sub-dimensions, construction of non-heritage experience facilities has an average

rating of 3.49, and non-heritage research faculty development has an average rating of 3.71. Non-heritage teaching resource development measured the least at 3.23 and the availability of specialized non-heritage experience bases registered the lowest with 3.00. When combined, these numbers imply that most of the respondents viewed the non-heritage research and learning program of the school as only moderately developed. The available experience facilities had not extended to all parts of the institution, the number of instructors was inadequate to cover the existing demands on instruction, the extent and intensity of non-heritage teaching resources were still inadequate to provide a rich program, and experience bases that are specifically designed to serve different types of intangible cultural heritage were also lacking. All these shortcomings indicate the directions that urgently need attention and investment, providing a solid basis on which further endeavors to develop the sustainable development of the non-heritage study program of the school will be based.

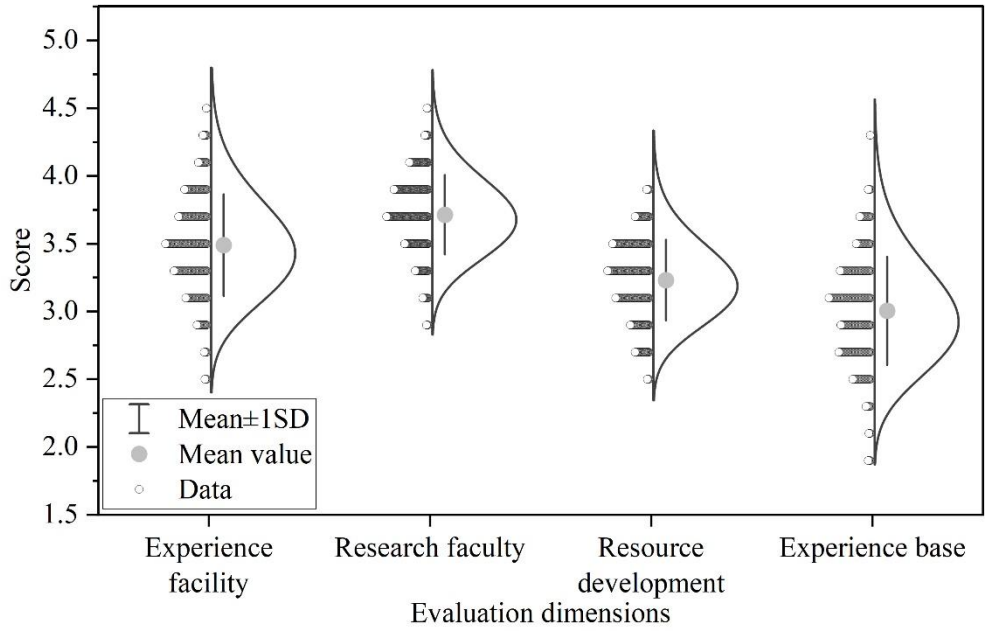

Figure 4: The degree of development of non-legacy research courses

4 Strategies for the sustainable development of NRL studies and research

Based on the previous discussions concerning the quality of non-heritage research experience, participant perceived value, and the level of curriculum development in the non-heritage study program of the school, a clear picture is painted: the present condition of non-heritage teaching and learning in this institution indicates some gaps that have to be filled using a well-thought-out corrective measure. In order to remedy these weaknesses and ensure continued healthy development of non-heritage research and learning, this paper presents a set of specific improvement measures which will be discussed later on in the sections.

4.1 Innovations in publicity channels

The use of a combined offline and online promotional model is recommended as a step towards diversifying the approaches used in outreach, increasing knowledge of non-heritage themed research projects in the general population, and consequently enhancing the sustainable development of non-heritage oriented study programs. To date, the offline dissemination

process has largely been kept within the sphere of promoting events that take place during festivals and holidays, which leads to a limited and repetitive set of engagement formats. Institutions need to build on current publicity channels, enhance general coordination, and strategic planning, and proactively reach out to the communities, schools, classrooms, and households with non-heritage study initiatives through structured outreach programs. In the digital world, professionals must ensure that their actions are in line with the current tendencies in the internet-based communication and utilize the popularity and immediacy of online networks. The practical steps in this regard would be the creation of non-heritage themed study sessions based on the web, holding live interviews with the carriers of intangible heritage through online channels, popularizing and selling non-heritage products of culture and creativity through livestream formats, and the consistent implementation of official social media accounts and channels of messaging platforms to increase the audience interaction and improve public perceptions of non-heritage culture.

4.2 Quality enhancement of study facilities

In the process of non-heritage theme study development, it is also necessary to improve the internal cultural foundation and supporting service facilities. First of all, we should build a research base with a distinctive theme of non-heritage, continuously improve and perfect the supporting services, strengthen the collaboration between government and enterprises, speed up the progress of the project, and promote all kinds of research and study facilities as soon as possible. The second is to continuously improve the intangible cultural heritage study service facilities. High-quality lodging and catering, more people to participate in the study activities to experience the fun. Third, upgrading safety facilities. Strengthen the construction of disaster prevention and resistance, emergency access, medical support and other facilities in all kinds of study centers, venues and bases, so as to provide safety protection for relevant participants.

4.3 Diversity-integrated curriculum design

Based on research learning is an all-embracing practical course which incorporates classroom teaching with school topics and promotes student involvement in similar areas of study through real-life experience. Through systematic organization of intangible cultural heritage information found in chapter content of textbooks, teachers are able to create organized design reports on heritage-themed research projects, giving students clear guidelines and support. The educational process of cultural inheritance may also be continued outside the classroom: schools may encourage pupils to attend museums on intangible heritage and experiential bases. These trips enable the youth to interact with the old traditions and cultural resources of their hometowns and bring the culture to life, becoming tangible and personal to them. In terms of creating study programs based on heritage, there should be no strict patterns that only focus on observation and practical training. It is better instead to connect heritage topics with the tempo of the traditional festivals including the Mid-Autumn Festival, Double Ninth Festival, Dragon Boat Festival, Spring Festival, and Lantern Festival. Integrating cultural education into such events enables the curriculum to grow naturally, adding different types of instruction that are not only lively but also meaningful. This leads to a curriculum that takes students out of mere reception and into actual cultural activity, enhancing their knowledge and respecting the living traditions that characterize their communities.

4.4 Cultivation of Professional Teachers and Talents

(1) Strengthen the training, provide talent support

Research and development, talent is fundamental, and strengthening the cultivation and

training of the talent team is the key. It can be realized through the following ways:

First, design the relevant system of non-heritage research and study talent training program.

Secondly, inter-disciplinary formation of talent teams. Let the students' experience of non-heritage and to learn will not stay on the surface, but fully integrated in the process of curriculum implementation, deeply feel the unique charm of non-heritage.

Thirdly, organize non-heritage research and study creative design competition, in order to promote the non-heritage research and study of the forward development of precise force, convergence and formation of talent think tank.

(2) Innovative apprenticeship training methods, growing the inheritance team

The main body of the inheritance of non-heritage is the group of people who have mastered the skills, that is, the non-heritage bearers. Due to the plight of serious aging of non-hereditary inheritors in general, actively guide non-hereditary inheritors to jump out of the fixed thinking, through the electronic platform to broaden the area of teaching apprentices, so as to make the team of inheritors continue to grow. The following measures can be taken:

First, highlight the discovery of enthusiasts. Relying on venues such as non-heritage museums and exhibition halls offline, and opening up platforms such as Smart Tour and E Tour online, the non-heritage inheritance code is publicized through smart screens and dynamic posters.

Second, strengthen online management. The “inheritor code” realizes the functions of assessment, record, promotion, communication and display. Through the platform on the code, the non-heritage content and non-heritage skills courses are pushed out to provide online learning resources for users.

Third, improve the training system. The online training of inheritors is realized by “quantitative rating” and “master and apprentice rating”. Offline, after users meet the evaluation requirements, they will be absorbed as preparatory inheritors by means of “one-to-one” master-apprentice relationship.

5 Conclusion

In this study, students of various grade levels in one school were used as the research participants. The interview outline and survey questionnaire were designed to collect information related to the intangible cultural heritage research activities conducted in the school. Survey responses were all taken on a five-point Likert scale, and various methods of analysis were used to assess the quality of heritage studies experiences, student valuations, and the condition of associated curriculum development. Based on these assessment findings, the research proposes a package of sustainable development measures based on the overarching mandate of intangible cultural heritage preservation.

(1) The general evaluation of the heritage research experiences conducted by the school was positive. Nevertheless, the educational experience aspect was rated at 3.59 which is significantly low. As there is a high association between this dimension and sustainable development of heritage programs, these results imply that schools should focus more on improving the educational aspects of their research.

(2) Student participation in heritage study activities resulted in a mean score of 4.63 on perceived educational value. The outcome indicates that these programs are significant in nurturing student awareness concerning cultural preservation.

(3) The ratings of the heritage research program of the school was relatively low in two aspects; the creation of heritage experience facilities and the training of a professional research faculty. Neither dimension had a rating higher than 3.71, which shows that there is a lot of room to improve.

(4) The study suggests strategies that are aimed at promoting the sustainable development of school-based heritage research programs, especially those related to the diversification of the channels of publicity and the improvement of the general level of study facilities.

About the Author

Yingying Wang was born in 1982 in Zhengzhou, China. I hold a master's degree from Henan University. Currently, I work as a teacher in the College of Tourism Management at Zhengzhou Tourism College. My main research interests focus on study travel and tour guiding.

References

[1] Monova-Zheleva, M., Zhelev, Y., & Nikolova, E. (2020). Intangible cultural heritage presentation and preservation–Challenges and Opportunities for Museum Specialists. Digital Presentation and Preservation of Cultural and Scientific Heritage, 10, 233-240.

[2] Skounti, A. (2017). The intangible cultural heritage system: Many challenges, few proposals. Santander Art and Culture Law Review, 3(2), 61-76.

[3] Jiang, X., Syed Mukhiar, S. N., & Md Noor, S. (2024). The Methods and Impacts of Intangible Cultural Heritage Revival: A Systematic Literature Review. International Journal of Academic Research in Business & Social Sciences, 14(11).

[4] Li, X., & Li, Z. (2021, July). Design innovation of intangible cultural heritage: Challenges on the basis of mobile phone culture. In International Conference on Human-Computer Interaction (pp. 37-46). Cham: Springer International Publishing.

[5] Kapp, P. H. (2019). How intangible cultural heritage can make historic preservation and postindustrial regeneration more sustainable. Journal of Architectural and Planning Research, 36(1), 1-14.

[6] Zhao, Y. (2024). Protection and inheritance of representative Qiang ethnic Salar transmitters in Wenchuan County: An analysis based on cultural heritage mechanisms. Resources Data Journal, 3, 129-139.

[7] Zhou, Y., & Zhu, X. (2024). Representative inheritor of Guangdong Province Wushu Intangible Cultural Heritage Project Construction of assessment indicator system and quantitative data. Journal of Modern Social Sciences, 1(2), 544-562.

[8] Gao, Y., Li, M., Li, Q., Huang, K., & Shen, S. (2022). Inheritors' happiness and its relevant factors in intangible cultural heritage. Sustainability, 14(21), 14084.

[9] Zhou, M., & Li, H. (2024). Observation on the new Exploration Status of Inheritance, Development and Protection of Traditional Folk Culture. Curriculum Learning and Exploration, 2(3).

[10] Cai, Z., Cai, K., Huang, T., Zhang, G., & Chen, R. (2024). Spatial distribution characteristics and sustainable inheritance strategies of national traditional fine arts intangible cultural heritage in China. Sustainability, 16(11), 4488.

[11] Kwasek, M., & Piwek, A. (2020). Supporting study tours in the teaching of architectural heritage. World Transactions on Engineering and Technology Education, 18, 479-484.

[12] Dabamona, S. A., & Cater, C. (2019). Understanding students' learning experience on a cultural school trip: findings from Eastern Indonesia. Journal of Teaching in Travel & Tourism, 19(3), 216-233.

[13] Vasconcelos, S., Kastenholz, E., Carneiro, M. J., & Cunha, C. (2020, October). Crossing Borders in Cultural Heritage Management Training in Higher Education–The Case of E-Cul-Tours. In International Conference on Tourism, Technology and Systems (pp. 509-517). Singapore: Springer Singapore.

[14] Dabamona, S. A., Cater, C., Cave, J., & Low, T. (2021). Cultural identity through an educational school trip: Voices of native Papuan students. Tourism Management Perspectives, 38, 100807.

[15] Binbin, T., Sereerat, B. O., Songsiengchai, S., & Thongkumsuk, P. (2024). The Development of Intangible Cultural Heritage Curriculum Based on Experiential Learning Theory to Improve Undergraduate Students Understanding in Intangible Cultural Heritage. World Journal of Education, 14(1), 43-53.

[16] Scharoun, L. (2016). Short-term study tours as a driver for increasing domestic student mobility in order to generate global work-ready students and cultural exchange in Asia Pacific. Perspectives: Policy and Practice in Higher Education, 20(2-3), 83-89.

[17] Ieong, F. (2024, May). Construction and Application of Macao Intangible Cultural Heritage Digital Study Tour Platform Based on RMP Theory. In The World Conference on Intelligent and 3D Technologies (pp. 301-311). Singapore: Springer Nature Singapore.

[18] Susilo, A., Sari, R. W., & Satinem, Y. (2024). History learning for students through Lubuklinggau local history study tour activities. LANGGAM: International Journal of Social Science Education, Art and Culture, 3(2), 1-7.