

Perceptions of Non-Zhuang Residents in Guangxi Towards Zhuang Arts: Scale Development and Validation

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Abstract

This article aimed to study the perceptions of non-Zhuang residents in Guangxi towards Zhuang arts and develop a scale named "Perceptions of Non-Zhuang Residents in Guangxi Towards Zhuang Arts." The sample consisted of non-Zhuang residents in Guangxi, China. The instrument for collecting data was a Chinese online questionnaire collection tool called "Questionnaire Star." Analysis of data through descriptive statistics and content analysis. The research results were found as follows: identified five latent factors through exploratory factor analysis. Each latent factor contained five test items. However, the study also revealed limitations and challenges, including an incomplete theoretical background and deficiencies in the dimension setting. Hence, suggestions for future research were proposed, emphasizing the importance of comprehensive theoretical review, integration of theoretical and empirical studies, exploration of cross-cultural applicability, and refinement of measurement instrument design. Through these recommendations, it is hoped that future researchers can further refine and deepen the findings of this study, thereby advancing knowledge in this field.

Keywords: Perceptions; Zhuang Arts; Measurement Tool

Introduction

Population data from China Statistical Yearbook – 2021 book statistics show to us the current Zhuang population is 1,956,8546. Although about 14 thousandths of China's total population seems to be a little number, but it is equivalent to the total population of Chengdu, Guangzhou and Shenzhen in China today. To author, as a member of the Zhuang ethnic group, became interested in the development of the art contained in the Zhuang culture. The Outline of the Fourteenth Five–

Year Plan for the National Economic and Social Development of the Guangxi Zhuang Autonomous Region and the Vision 2035, the Outline proposes that, during the Fourteenth Five-Year Plan period, Guangxi will continue to enhance the level of public cultural services, will promote the casting of the soul of culture and the empowerment of culture, will pass on and carry forward the outstanding traditional culture of the Chinese nation, will strengthen the construction of major cultural facilities and cultural projects, and will promote the prosperity of news, publishing, broadcasting, film, television and the literature and art industries. Shum et al. (2020) concluded the government's policy support and financial input help to raise public awareness of the value of local arts and culture, as well as its acceptance of multiculturalism and its attitude of tolerance, which can enhance the dissemination of local arts and culture and the recognition of the masses.

Therefore, the development of Zhuang art not only relies on folk organizations, but also receives support from the government, which is very important for the development of culture in China's minority regions and means that material support will be received. Based on this background, the development of Zhuang art has a guarantee of sustainability and affirms the value of research. The Zhuang art is all-encompassing, and the number of existing scholars of Zhuang art is increasing day by day, with in-depth and systematic basic research already in place in every conceivable sub-field. When author was not sure how to choose the research topic, author did two preliminaries, the first one was to use China's online questionnaire tool, Questionnaire Star, to randomly ask college students around me and their parents about their "impression of Zhuang art", and the second one was to search for the online published literature with the keyword of "Zhuang" on the China Knowledge Network (CNKI). Figure 1 is a graphical representation of the findings produced by Questionnaire Star's own analytics function, called the "word cloud". Its purpose is to show the frequency of occurrence of words in randomized interviews; the larger the area occupied by a font graphic, the more frequently it is mentioned.



Figure 1. Questionnaire Star randomly surveys 20 people's Word Cloud

The high-frequency vocabulary words include "mountain song", "Zhuang brocade" and "dress", while the medium-frequency words include "copper drum", "Zhuang language" and "frog", "Zhuang language", "frog". "copper drums" and "frogs" are all symbols of Zhuang culture, but author was surprised to learn that there is a word for "decline", the word came out of nowhere, like a black swan, Lopez-Rodriguez et al. (2022) Summarized that naïve realism makes people more inclined to think that their views are objective and unbiased, So even members within the nation still lack knowledge about the development of the nation as a whole, let alone about the development of the arts within the culture.. As of August 2023, there were 34,336 papers with the keyword "Zhuang" on the China Knowledge Network (CNKI), the earliest of which was "The New Development of the Boys' Drama" in 1955, and the number of papers included reached the hundredth percentile in 1983, and exceeded the thousandth percentile in 2006, with 27 of them being the "National Art Science Planning Project". Twenty-seven of them are projects supported by the "National Art Science Planning Project" fund. From the data, I can infer that the research on "Zhuang" or "Zhuang culture" has become very mature, but are there still problems that need attention? I tried to sort out the 26 review articles, but unfortunately found that except for one review on snacks, costumes and songs, the other 23 articles were all related to the theme of "Zhuang medicine", and in order to find out that there are more research-oriented studies on Zhuang culture, I used "applied basic research" as the filtering condition to count the number of research projects. In order to find out more research oriented on Zhuang culture, "applied basic research" was used as the filtering condition, and the statistics were summarized in Fig. 2:

Based on the trend of published articles, combined with the fact that the public awareness of Zhuang art is not very high, it can be inferred that the sustained input of research materials has not achieved satisfactory results in terms of population awareness. The purpose of this study was to create a scale that would provide a means of explaining the results of the occurrence of this cognitive abnormality. The process of creating the questionnaire was divided into theoretical tracing, setting variables and test items, and the questionnaire was developed and tested through SPSS.

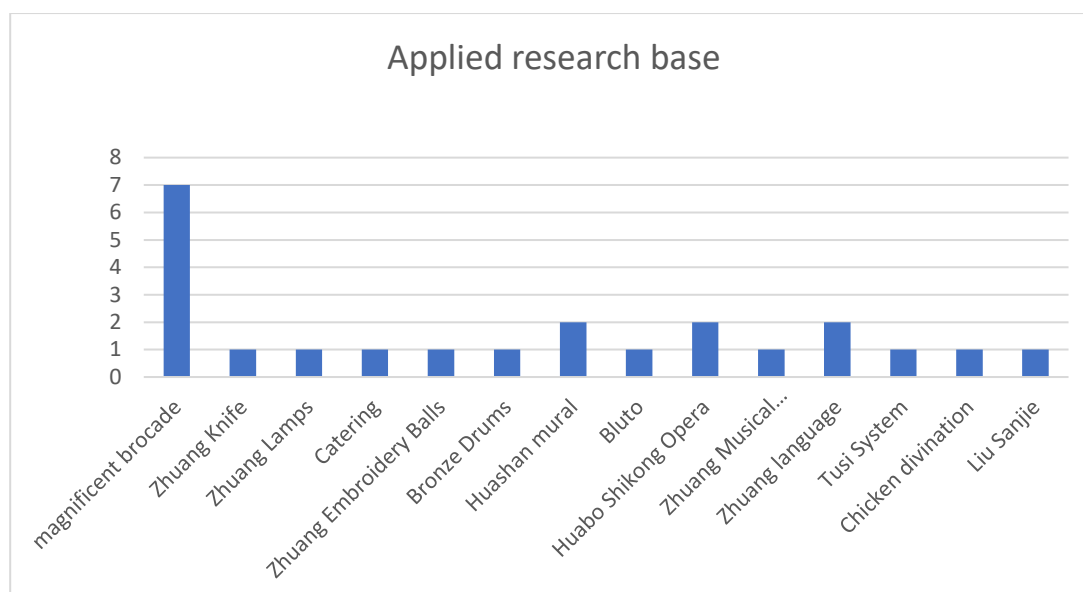


Figure 2. Number of statistics on the applied research base of Zhuang culture in CNKI

The field of this study is mainly set as Zhuang art in Guangxi Zhuang Autonomous Region of China, the research question is set as the perception of the resident population of Guangxi on the current development of Zhuang art, and the sampling population is set as the resident population of the whole urban area of Guangxi. In the author's previous research, he has already completed the combing of the existence status of representative Zhuang art in Guangxi, integrated the historical timeline of Zhuang development, and completed the research on the application of Zhuang art to tourism landscape planning. The target audience for research in this area is scholars interested in the study of Zhuang culture and minority cultures, or businessmen who want to invest in cultural industries, as well as non-Zhuang people living in the Guangxi area, or members of the governmental development and reform commissions who want to formulate strategies for the development of the Zhuang people.

This study was conducted from 2021 to 2023, with a random questionnaire survey of prefecture-level cities included in Guangxi, China, and the data collection and organization was completed in 2023 through SPSS 26.0.

This research paper presents the current population size of the Zhuang people in Guangxi, China, and the current development of Zhuang culture and art, and the statistics or support policies related to them. It was found that there are significant cognitive differences in the development of ethnic arts in the population, and a scale was designed and developed to capture the information of such cognitive differences. This study focuses on the literature review of the scale structure and the

exploration of the underlying factors of the scale. It is hoped that the results of this study will serve as a research tool for policy makers and stakeholders.

Research Objectives

The purpose of this study is to develop a scale and validate for perceptions of non-Zhuang residents in Guangxi towards Zhuang arts.

Literature Review

1. Gyegwe et al. (2016) highlight art's integral role in culture, emphasizing its functions in communication, indoctrination, and religious transmission. This underscores the interconnectedness of art and cultural dynamics, laying the groundwork for understanding the broader cultural implications of artistic expression.

2. Yang et al. (2020) suggest that cultural background significantly influences art viewers' sharing behavior, indicating a need for research to explore the complex interplay between cultural factors and art consumption behaviors comprehensively. This aligns with Gyegwe et al.'s (2016) emphasis on the cultural context of art and its societal impact.

3. Julian (1972) discusses how systems of thought influence cultural evolution, providing insights into the ideological influences on artistic creation and thematic choices across historical periods. This complements Gyegwe et al.'s (2016) perspective by elucidating the underlying mechanisms driving cultural changes reflected in art.

4. Brown (2000) summarizes social identity theory, highlighting its relevance in understanding how individual and group identities shape behavior and interactions. This theoretical framework provides a lens through which to analyze the social dynamics underlying art consumption behaviors, as discussed by Yang et al. (2020).

5. Whitaker (2019) applies social identity theory to teacher-student relationships, demonstrating its broader applicability beyond traditional domains. This illustrates the versatility of social identity theory in analyzing social dynamics, which may also extend to the consumption of cultural products like art, as discussed by Yang et al. (2020).

6. Berry's (1997) theory of acculturation offers insights into how individuals navigate cultural transitions, shedding light on the complexities of cultural adaptation. This framework provides a

broader understanding of the cultural contexts influencing art consumption behaviors, complementing the discussions by Yang et al. (2020) and Gyegwe et al. (2016).

7. Belk (2016) discusses the influence of personal beliefs on consumer behavior, highlighting the role of cultural elements in shaping individual identity and consumption patterns. This underscores the importance of considering cultural factors in understanding art consumption behaviors, as emphasized by Yang et al. (2020) and Gyegwe et al. (2016).

8. Chieffi et al. (2021) suggest that cultural background significantly influences art viewers' sharing behavior, echoing the findings of Yang et al. (2020) and reinforcing the importance of considering cultural factors in understanding art consumption behaviors. This further highlights the interconnectedness of cultural dynamics and art consumption behaviors discussed throughout the literature review.

The literature review elucidates various theories and findings related to art, culture, identity, and consumer behavior, highlighting their interconnectedness and relevance to understanding human behavior. From the integral role of art in culture discussed by Gyegwe et al. (2016) to the influence of social identity on art consumption behaviors explored by Yang et al. (2020), these discussions collectively provide a comprehensive framework for understanding the complex interplay between art, culture, identity, and consumer behavior. Moreover, the review underscores the importance of considering cultural factors in analyzing art consumption behaviors, as highlighted by the various theoretical perspectives and empirical findings discussed. Yet there are still many under-explored areas on how to understand the complex relationship between art consumption behavior and cultural dynamics. Although existing studies have emphasized the importance of art in culture and the influence of cultural context on art consumption behavior, we still need to delve deeper into the interactions between these factors and the mechanisms of influence. In particular, under the frameworks of social identity theory, cultural evolution theory, and cross-cultural adaptation theory, we need to further investigate how to explain and predict individuals' perceptions, evaluations, and behavioral responses to artworks.

Conceptual Framework

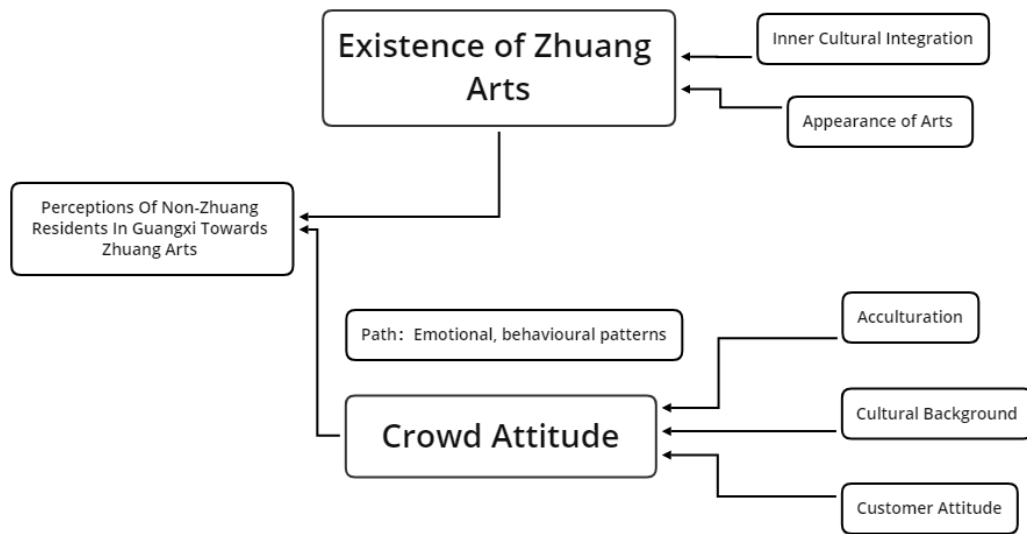


Figure 3. Conceptual Framework

This research is a research study developing a scale for non-Zhuang residents of Guangxi on their perceptions of Zhuang art. The researcher defines the research conceptual framework based on the theory of social identity together with Cultural orientation model and Cultural background and Consumer attitudes. The details are as above (Fig.3).

Research Methodology

In this study, four measurement dimensions and 34 test items were set by summarising the literature review, and an electronic questionnaire was created through Questionnaire Star, which was used to conduct random interviews with 161 permanent non-Zhuang residents in the Guangxi region, and to conduct an EFA on the questionnaire data to ultimately determine the number of potential factors and the reliability and validity of the questionnaire. The specific development process followed the three stages proposed by Whitaker (2019), namely 1. item generation and assessment of the validity of its content; 2. scale construction; and 3. scale evaluation.

Research Results

The results showed that, as Table 1, The formal questionnaire consisted of three sections: the first section contained questions on the demographic characteristics of the respondents, the second section contained 34 test items, and the third section contained other suggestions or comments. The scales were all on a 5–point Likert scale. After the questionnaires were recovered, 150 valid questionnaires were retained by screening the responses for completeness. The questionnaire data were entered into SPSS26.0 software, and factor analysis was performed by factor analysing the overall items, KMO and Bartlett's test of sphericity for all items, factor extraction by principal component analysis, and factor rotation by maximum variance method.

Table1. Statistical indicators of demographic characteristics of respondents

<i>Demographic Characteristics</i>						<i>N=150</i>		
City	F	%	Gender	F	%	Academic	F	%
						Qualifications		
Bai Se	4	3	Male	65	43.3	Junior high school and below	9	6.0
Bei Hai	19	13				High school/secondary school	15	10.0
Chong Zuo	7	5						
Fang Chenggang	18	12						
Gui Lin	15	10				University	39	26.0
He Chi	7	5	Female	85	56.7	university college		
He Zhou	4	3				undergraduate course	76	50.7
Lai Bin	5	3						
Liu Zhou	22	15						
Nan Ning	16	11				Postgraduate and above	11	7.3
Qin Zhou	7	5						
Wu Zhou	21	14						
Yu Lin	5	3						
Total	150	100.0	Total	150	100.0	Total	150	100.0

As can be seen from the table of demographic sample indicators, the difference in the number of respondents per city is not too great, the proportion of male and female respondents does not differ much, and the larger proportion of respondents with a higher level of education is university. Trinh (2023) by reviewing the studies on higher education, it was noted that higher education is seen as a production line for the production of qualified human resources and has a

significant impact on economic growth. Huang et al. (2022) It is also believed that by fostering cultural acceptance among university students, it will not only promote their personal growth and all-round development, but also support social harmony, innovation and international cooperation, thereby contributing to the overall progress of society. Lee et al. (2021) also concluded that higher education institutions have promoted in-depth understanding and appreciation of local arts through arts education and cultural activities, and that multicultural acceptance and tolerant attitudes have further contributed to the dissemination of local arts and culture and mass acceptance.

Table 2. Exploratory factor analysis results (N=150)

Factor	Measure Item	FL	Eigenvalues	Explained Variance%	Explained Cumulative Variation%	Cronbach's α
ZATR	ZATR1	0.704	11.141	42.849	42.849	0.922
	ZATR2	0.728				
	ZATR3	0.713				
	ZATR4	0.748				
	ZATR5	0.746				
	ZATR6	0.713				
CHD	CHD1	0.755	2.615	10.058	52.908	0.912
	CHD2	0.722				
	CHD3	0.808				
	CHD4	0.697				
	CHD5	0.741				
ZCI	ZCI1	0.734	1.945	7.481	60.389	0.903
	ZCI2	0.767				
	ZCI3	0.765				
	ZCI4	0.666				
	ZCI5	0.741				
ZCC	ZCC1	0.763	1.725	6.634	67.023	0.905
	ZCC2	0.706				
	ZCC3	0.763				
	ZCC4	0.691				
	ZCC5	0.761				
RCE	RCE1	0.711	1.595	6.136	73.159	0.891
	RCE2	0.729				
	RCE3	0.706				
	RCE4	0.709				
	RCE5	0.734				

An initial screening of the items was carried out using item score means and item–total correlation coefficients ($n=150$). The KMO value was 0.908, and the Bartlett's test of sphericity was significant ($\text{Sig.}=0.000$, $p<****$), indicating that it was suitable for valid factor analysis. At this point, eight potential factors were analysed, and, combined with the results of the analysis of the rotated component analysis matrix, the under–explained question items: 2, 4, 6, 7, 8, 11, 12, 16, and 20 were excluded and re–validated, and the KMO value rose to 0.924, at which point 5 potential factors were analysed. The final results of the analysis are shown in Table 2. The structure consists of five factors, and the factor loadings of all the items are above 0.500, so that the data of all the test items can be retained. The cumulative explained variance of the five factors was 73.159%, which exceeded the critical value of 60.000% (Hair et al.). Based on the content and characteristics of the items included in each factor, the factors were named to directly follow the vocabulary devised by the theoretical framework as "Regional Cultural Evolution (RCE)", "Zhuang Art–Tech Relationship (ZATR)", "Cultural Hybridization Degree (CHD)", "Zhuang Cultural Influence (ZCI)" and "Zhuang Culture Consumption (ZCC)".

Discussions

This seminar discusses both the usability and limitations of the scale.

1. The scale was developed to help us gain insights into the attitudes and perceptions of non–Zhuang ethnic residents towards Strong ethnic arts. First, through exploratory factor analysis, I clarified the internal structure of the scale and derived five potential factors, which helped the researcher to understand the attitudes of the surveyed groups more comprehensively. In addition, the options under each factor provided the respondents with a diversity of choices, which more accurately captured their different perceptions of Zhuang art. Through the use of the scale, the researcher can assess the level of non–Zhuang ethnic residents' knowledge of Zhuang art, their identification with Zhuang culture, and their attitudes towards the consumption of related art products. This information is important for cultural exchange, cultural protection and tourism development, and provides valuable reference for policy makers and practitioners.

2. Despite the usability of the scale, there are some limitations to consider. Firstly, the development process of the scale is mainly based on exploratory factor analysis, which has not yet been verified by validation factor analysis, so the validity of the scale structure has yet to be further confirmed. In addition, the scale was only designed for non–Zhuang residents in Guangxi region, which may have geographical and population bias, limiting the generalisability of the findings. In

addition, the options of the scale may be influenced by cultural background and language expressions, which may lead to insufficient applicability in other cultural contexts. In addition, the design of the scale may also be influenced by the subjective preferences of the researcher, which is somewhat subjective. Finally, the results of the scales are influenced by the subjective attitudes and response preferences of the respondents and may be subject to response bias.

Knowledge from Research

Through this study, it is possible to:

- 1 The method of using exploratory factor analysis (EFA) to explore the internal structure of the new scale was demonstrated to be feasible.
2. Five potential factors were identified during the validation process, which contributed to a better understanding of non-Zhuang ethnic residents' perceptions of Zhuang art in Guangxi.
3. This scale can be used as a survey tool in studies assessing the perceptions and attitudes of non-Zhuang ethnic residents towards Zhuang art, and the interpretations and meanings of the factors are of theoretical reference value for understanding cultural differences between groups and promoting cultural exchange and art inheritance.

Conclusion

The purpose of this study was to explore the perceptions of non-Zhuang residents in Guangxi Towards Zhuang Arts, and to achieve this goal by developing the scale "Perceptions of Non-Zhuang Residents in Guangxi Towards Zhuang Arts". Through exploratory factor analysis (EFA), author successfully identified five potential factors. The key findings of this study provide new insights into the perception of Guangxi Zhuang Arts by non-Zhuang residents and offer useful insights for research and practice in related fields.

However, despite the results of this study, there are still some shortcomings that need to be noted. Firstly, author failed to conduct sufficient theoretical backtracking on the research topic, which may affect our in-depth understanding and analysis of related fields. Second, author may have certain deficiencies in setting up the dimensions of the scale, which led to certain limitations in the scale's ability to capture the diversity and complexity of non-Zhuang residents' perceptions of Strong art.

In future research, following researcher should endeavour to remedy these deficiencies by further deepening our theoretical exploration of the research topic and considering the relevant

dimensions more comprehensively in the scale design to improve the accuracy and reliability of the scale. In addition, author should incorporate more research methods and tools, such as validated factor analysis and in-depth interviews, to further validate and enrich the results of this study.

Overall, this study provides us with a preliminary understanding of non-Zhuang residents' perceptions of Zhuang art, but it still needs to be further deepened and improved in future research to better promote cultural exchange, enhance cultural understanding, and make a greater contribution to art inheritance and conservation.

Suggestions

Exhaustive Theoretical Retrospectives: Given that author were unable to conduct adequate theoretical retrospectives on the dimensions of acculturation, cultural background and consumption attitudes, it is recommended that future studies conduct a more comprehensive and in-depth survey of the literature in the relevant areas prior to scale design. This would help to ensure that the content and structure of the scale can adequately cover the major theoretical perspectives and research advances in the study area.

Refinement of Dimension Setting: Although author successfully extracted the five latent factors, there may still be some shortcomings in the dimension setting. It is recommended that future researchers explore and refine the scale dimensions in depth through more qualitative research or expert interviews, etc., to ensure that the extracted factors can fully reflect the multiple aspects of the research topic.

Combination of theoretical retrospectives and empirical studies: Future studies can combine theoretical retrospectives with empirical studies, both to explore in depth the perceptions and attitudes of non-Zhuang ethnic residents towards the Zhuang art from the theoretical level, and to validate the theoretical perspectives through empirical data. Such a research design helps to improve the scientificity and credibility of the study.

Exploration of cross-cultural applicability: Considering that the scope of application of the scale may not be limited to non-Zhuang residents in Guangxi, it is recommended that future researchers further explore the cross-cultural applicability of the scale. The applicability and robustness of the scale in different cultural settings can be assessed by expanding the scope of the sample, and validating the scale in different regions and in different cultural contexts.

Improvement of scale design: Given the possible limitations and shortcomings of the scale design, future studies may consider revising and improving the scale through more expert reviews,

sample surveys and empirical tests. This could help to improve the reliability and validity of the scale and enhance its usability in research and practice.

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