



RESEARCH ARTICLE

Ancient Intangible Cultural Heritage Assets and Inventive Materials for Making Paper-Cutting Arts at Zhangpu's Communities, Fujian Province of the PRC

Bao Li Cui¹, Vuthipong Roadkasamsri²

¹Faculty of Fine - Applied Arts and Cultural Science, Mahasarakham University, Maha Sarakham, Thailand.

| ARTICLE INFO | ABSTRACT |
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| Received: May 17, 2024 Accepted: Jul 29, 2024 | Quantitative data survey research describes the two sample groups: 50 young and 50 elderly people's perceptions of their ancient intangible cultural heritage assets, and local plant-type raw materials for inventive cultural paper-making heritage art platform designs. The ancient heritage assets' perceptions using the 60-item Questionnaire on Intangible Cultural Heritage Asset Inventory (QICHAI) in 12 ancient assets. The local plant-type raw materials using the 30-item Questionnaire on Cultural Paper-making Material Heritage Inventory (QPMHI) in six raw materials. The two groups' attitudes were assessed with the 10-item Archaeological Ancient Heritage Asset Attitude (AAHAA) and the 10-item Paper-Cutting Art Heritage Attitude (PCAHA). Most of the four research instruments' responses in the five options indicated valid and reliable. Statistically significant differences were found between the two groups' perceptions of ten of twelve ancient assets for the QICHAI, and all local plant-type raw materials were differentiated significantly into two groups for the QPMHI, and showed significant differences for the AAHAA and PCAHA attitudes. Most of the research tools determine the elderly people's responses to their ancient heritage assets, and the raw materials are greater than the young people's response outcomes. Associations with the attitudes, the coefficient determinant predictive (R ²) values indicate that 53% and 60% of the variance in their attitudes to their twelve ancient intangible cultural heritage assets, and associate that 57% and 65% of the variance in their attitudes to their six-local plant-type material for inventive cultural paper-making art heritages were attributable to their perceptions for the young and elderly people's responses, respectively. |
| Keywords Local Plant-Type Raw Material Zhangpu County and Community Research Instruments Average Means were Compared Independent and Dependent Variables Variables were Associated | |
| *Corresponding Author: 64012465002@msu.ac.th | |

INTRODUCTION

Paper-cutting is a Chinese folk art with a long history of using simple tools to make beautiful patterns to record people's lives in ancient times. As a kind of intangible cultural heritage reflecting the history of regional culture and traditional changes, ancient art has its unique cultural and aesthetic values. There are modernized paper-cutting folk art metropolises, such as Shenzhen, an Intangible Cultural Heritage Promotion Center. One center, located at Mission Hills Maker in Longhua District, promotes Meixian paper cutting, which appears an original paper-cutting folk art from the expressive good wishes during festive days. It is one of the most popular forms of traditional art showcasing rural folk festival activities in local areas (Longhua Government Online, 2023). In China, the art of paper-cutting has a long history, and its skills and styles vary with different regions and times, paper-cutting art reflects the Chinese folk lifestyle, traditional beliefs, and ethics, and is an important part of Chinese culture. Paper-cutting has a broad mass base, blending in the social life of people of all ethnic groups, is an important part of various folk activities, and is also the most popular and national characteristic of the art category (Lin, 20016). People used other thin materials, through hollow carving techniques to make crafts, as early as the emergence of paper became popular, such as the use of carving, engraving, picking, engraving, cutting techniques in gold foil, leather, silk, and even cut patterns on the leaves (Weizi, 2021). Ancient people used techniques, such as carving, engraving, trimming, carving, and cutting to create patterns on gold foil, leather, silk, and even tree leaves when Chinese

paper-cutting was added in 2009 to the Representative List of the Intangible Cultural Heritage of Humanity by UNESCO, the world organization pointed out that paper-cutting is a “popular art integral to everyday lives” in China (Shanghai People's Association for Friendship with Foreign Countries, 2017).

The History and Development of Chinese Paper-Cutting

Chinese Paper cutting, also known as Jianzhi (剪纸), is a form of intricate art that involves cutting designs into paper. The oldest traditional folk arts in ancient China, providing a visual sense of transparency and artistic enjoyment (GoEast Mandarin, 2020). Chinese paper-cutting in Zhou Dynasty (BC 1046- 771), the earliest record of paper-cutting can be found in “Records of the Grand Historian” (史记 Shǐjì). It describes an incident during the early Western Zhou Dynasty when King Cheng of Zhou and his brother Duke Yu played together. When King Cheng used a Wutong leaf to cut a jade tablet for his brother, he invented the technique of crafting artworks using thin materials and hollowed-out carving. This was referred to as “paper cutting” (剪彩 jiǎncǎi) at that time (University of Hawai'i at Mānoa Library, 2009). Paper-cutting art is particularly, popular in rural areas because it is suitable for rural women to make in their leisure time. Paper-making techniques later spread to the Islamic world and Europe through the Silk Road and other trade routes. Over time, paper became widely used for writing, printing, and various other applications, playing a crucial role in the development of human civilization.

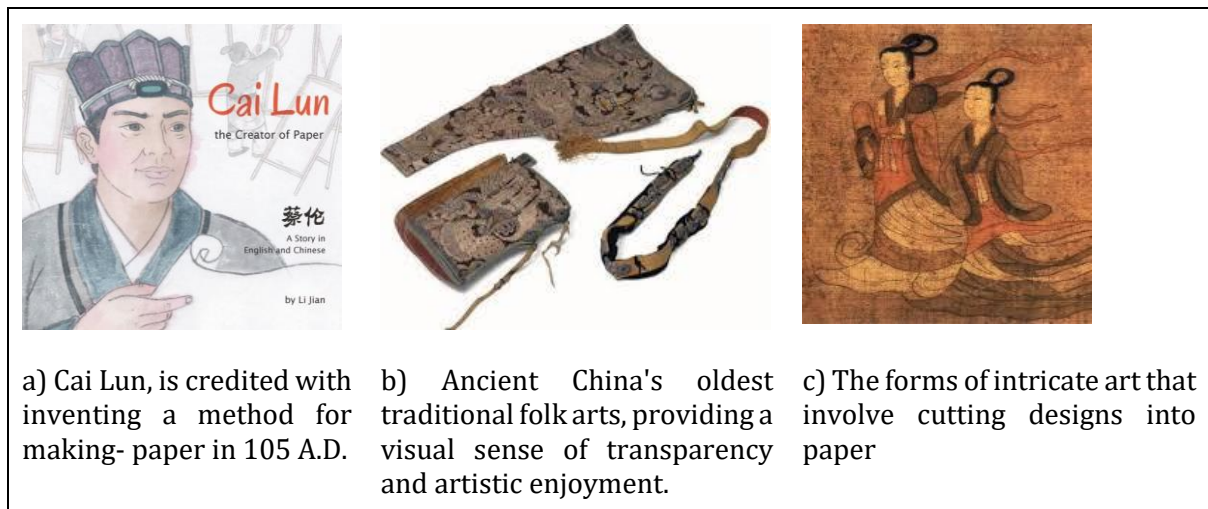


Figure Caption 1: Images show the background of the history and development of Chinese paper-cutting traditional folk arts

Source: a) Mohamad Salman (2022), b) and c) University of Hawai'i at Mānoa Library (2009).

Traditional Paper-Cutting Arts at Zhangpu Communities

Zhangpu County (Chinese: 漳浦; pinyin: Zhāngpǔ; Pèh-ōe-jī: Chiuⁿ-phó) is a county of Zhangzhou prefecture-level city in far southern Fujian province, the People's Republic of China. The county seat is located in the town of Sui'an (绥安镇). Zhangpu is bordered by the Longhai City in the north, the counties of Pinghe and Yunxiao in the west, and the Taiwan Strait in the south and east. The last two (Liu'ao and Gulei) share names with the long peninsulas where they are situated, which project into the Taiwan Strait to form large bays. The name of Zhangpu County derives from the city's former status as the seat of the imperial Chinese Zhang Prefecture. The same name was Romanized as Changchow on the Chinese Postal Map and Chang-chou in Wade-Giles. Other organizations include Chang-chow. Zhangzhou proper lies on the banks of the Jiulong River in southern Fujian about 35 miles (56 km) from central Xiamen (Baynes, 1878).



Figure Caption 2: Location and national environment of Zhangzhou City jurisdiction in Fujian Province

Sources: Zhangzhou Municipal Government Official (2020)

The Zhangpu communities in Fujian Province

In Huxi She Township (湖西畬族乡) there is a fortified compound called Zhaojiabao (赵家堡), where a party of Southern Song royals in flight from the Mongol invaders of the late 13th century is said to have taken up a residence long in term and low in profile. With the Ming restoration of Han Chinese ethnic supremacy to the empire some ninety years and five generations later, the Zhao family (赵家) revealed their pedigree and the compound received its current name (Huang, 2009). Zhangpu is located on the southern coast of Zhangzhou City, Fujian Province. Like other coastal cities in Fujian, the fishing industry is developed and the people are hard-working. Although most of the famous Fujian Tulou is located in Fujian's interior, there are a few Tulou structures in Zhangpu County, differently. A characteristic feature of the Tulou of Zhangpu County (and of coastal Fujian in general) was the use of granite blocks for the lower part of the wall, as opposed to boulders/cobblestones which were used for a similar purpose in Fujian's interior. The local folk tradition may claim greater antiquity for some Tulou elsewhere, several of the oldest Tulou whose age is documented are located in Zhangpu county, which was damaged by bombs dropped from a Japanese aircraft in 1934 (Huang, 2009).



Figure Caption 3: Paper-cutting art shapes new lives for Zhangpu community women

Source: Photos by Jiang Lu/chinadaily.com.cn (2021).

Zhangpu society and community, Lin Tao (1905-2010), one of four renowned Zhangzhou paper-cutting artists, used her superb abilities and ingenuity to document the customs of coastal communities in Southern Fujian. Her works feature her thoughts, and reflections on the world likely

traditional folk patterns. Zhangpu paper-cutting is monochromatic and emphasizes proportional composition, smooth lines, and graceful styles are designed. Zhangzhou paper-cutting has a powerful craft decoration effect due to the stark contrast. Zhangpu paper-cutting was included in the first batch of national intangible cultural heritage (ICH) items in A.D. 2008. Many techniques are used: the paper can be cut or engraved with a chisel, coloured, or left blank. Increasingly, modern technologies are used. Motifs, which vary greatly and are often devised by the artist, depend on the region of origin (for example, in southern China fine and delicate motifs predominate) and the purpose of the product, which might be used for interior decor (windows, beds and ceilings), festivities (weddings, birthdays and ceremonies), or prayers (invoking the rain, warding off the devil, and so on) (UNESCO Intangible Cultural Heritage, 2009).

Focused on this quantitative research data methods to create the conventional paper-cutting arts at Zhangpu country communities in Fujian Province of the People's Republic of China (PRC) for Developing Inventive Materials using the data survey and the involvers' responses of their perceptions to their questionnaires were assessed, average means were compared, and variables were associated.

METHODOLOGY

Quantitative research on the inheritance of Zhangpu paper-cutting art has been developed, reformed, and opened up by the local government, which attaches great importance to this conventional folk art treasuring the improvement and enhancement of the people's material living standards, the spiritual and cultural life needs are increasing with the concept, theory, and conceptual framework of Zhangpu's local wisdom and local knowledge whose they involve the creative the conventional paper-cutting arts at Zhangpu's communities were provided.

Research Objective

To associate the personnel involved in the Zhangpu paper-cutting art communities of their creative conventional paper-cutting arts to their developing inventive materials toward their attitudes on this local inventive cultural wisdom and heritage.

Research Procedures

Step I: Research review on the art techniques of paper-cutting in Zhangpu

This is the most researched direction in many materials, mainly to record the production techniques and characteristics of Zhangpu paper-cutting, and to accumulate knowledge for the inheritance and development of Zhangpu paper-cutting art. The types of Zhangpu paper-cutting can be divided by the representative characters and works of paper-cutting. The representatives of the previous generation of Zhangpu paper-cutting artists were reviewed.

Step II: Developing the inheritance of Zhangpu paper-cutting material art

In terms of organization-driven inheritance, to better popularize improve, and develop, Zhangpu County Cultural Museum has also established Zhangpu Paper-cutting Art Research Association, collected several folk paper-cutting works, organized paper-cutting art exhibitions, mobilized folk paper-cutting artists to contribute to various newspapers and periodicals, and compiled Zhangpu paper-cutting into local textbooks for kindergartens, primary schools and middle schools in Zhangpu County.

Step III: Local wisdom and local knowledge

Determinant the proceedings of explanation anthropology local knowledge: Further essays in interpretive anthropology as a concept to explain and local knowledge to local wisdom are related by people with a long history of interacting with the natural environment". The complex understandings, interpretations, and meanings are essential components of the cultural complex including language, naming and classification systems, resource use practices, rituals, spirituality, and worldviews.

Step IV: Investigations of community assets in Zhangpu County

Zhangpu Cultural Department held a paper-cutting training class at the Fujian Fine Arts Association and Fujian Provincial Hand Management Bureau held the "Fujian Folk Paper-Cutting Art in

Exhibition" in Fuzhou West Lake. Zhangpu Paper-Cutting Association was established as a professional institution for paper-cutting artists in Fujian province. Zhangpu County successfully declared "the Hometown of Chinese Folk Art (paper-cutting). Zhangpu County Paper-Cut Art Center was established, and paper-cutting art galleries or studios were established successively.

Step V: The materials and techniques of paper-making in Zhangpu County

The formation of the expression style of folk art can't be separated from the soil of folk custom. Folk activities are the embodiment of people's love for life and love for beauty. The characteristics and styles of folk arts are reflected in the trend of local folk aesthetics. The inheritance of local wisdom paper-cutting, in line with the inheritance of local wisdom mainly relies on folk oral teaching, is an art form with original ecological cultural characteristics. Scissors are the first choice of Zhangpu paper-cutting tools, Fujian Zhangpu paper-cutting scissors are different. the tools commonly used in paper cutting, including scissors, carving knives, utility knives, and cushion plates.

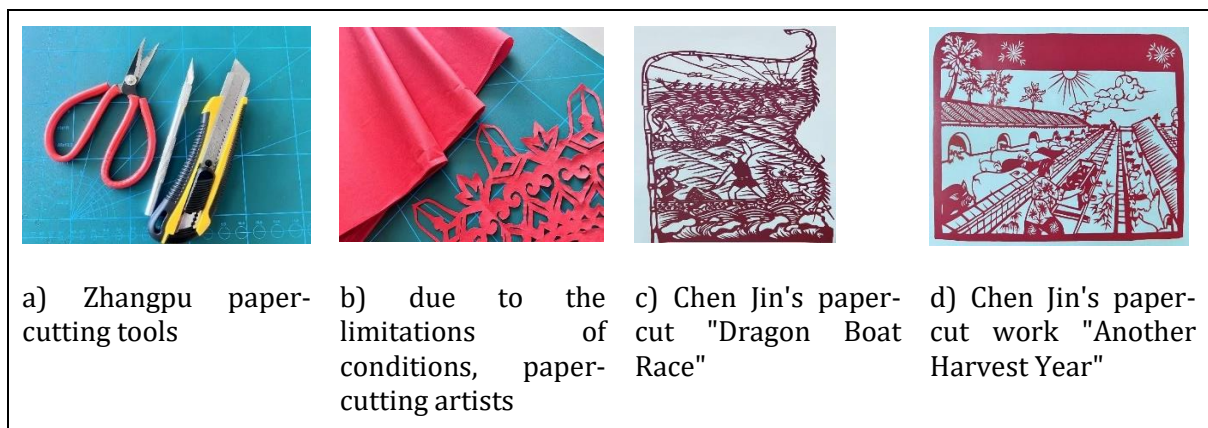


Figure Caption 4: The materials and techniques of paper-making inventions in Zhangpu County

Source: a) and b) Cui Bao Li (2023)

c) and d) Zhangpu Paper-Cutting Art Collection (2006)

The Publicity Department of Zhangpu County Party Committee (1999) showed excellent paper-cutting and embroidery skills of the Zhangpu artists who won certificated to respect and praise of their neighbors and villagers who boldly used a variety of abstract decorative art treatments of their creative modernized Zhangpu paper-cutting arts. Although people's lifestyles have changed in modern times paper-cutting has always maintained a significant presence as the values of Zhangpu paper-cutting arts have been changing and developmental by their creative thinking to their wisdom and heritage folk custom arts with the local wisdom inheritance sustainable.

Step VI: The research questionnaires

As for the identification of representative community assets in Zhangpu County, researchers need to collect and analyze data through the survey questionnaires to describe and determine the representative community assets. All the collected community assets would be made into the research questionnaire instruments, each asset set five options, respectively.

The Questionnaire on Intangible Cultural Heritage Asset Inventory (QICHAI)

The Questionnaire on Intangible Cultural Heritage Asset Inventory (QICHAI) assessed 50 young and 50 elderly people's perceptions. The QICHAI contained on 60 items in 12 intangible cultural heritage assets, namely: Zhangpu Confucian Temple (ZCT), Yianbao Traditional Settlement (YTS), Zhaojiapu Ancient Castle (ZAC), Lantingzhen Mansion Building (LMB), Zhangpu Red Building (ZRB), Liuaao Ancient City (LAC), Sanguan Emperor Temple (SET), Weihui Architecture Temple (WAT), Wushi Mazu Temple (WMT), Zhangzhou Binhai Volcano National Geopark (ZBVNG), Flower Expo Park (FXP), West Lake Park (WLP), and Tea Expo Park (TEP) at The Natural Assets are mainly natural landscape, specifically: Gulei Coastal Scenic Tourist Area, Puma Elephant Gallery tourist area, Lin Jinyu coastal volcanic scenic area. Each asset consists of 5 items in 5 options: Very Unrepresentative (1), Slightly Unrepresentative (2), Average Representative (3), More Representative (4), and Very

Representative (5), respectively (Figure Caption 5). The 60-item answer mainly focused on the Intangible Cultural Heritage Assets of Zhangpu County (Figure Caption 5).

The Questionnaire on Cultural Paper-making Material Heritage Inventory (QPMHI)

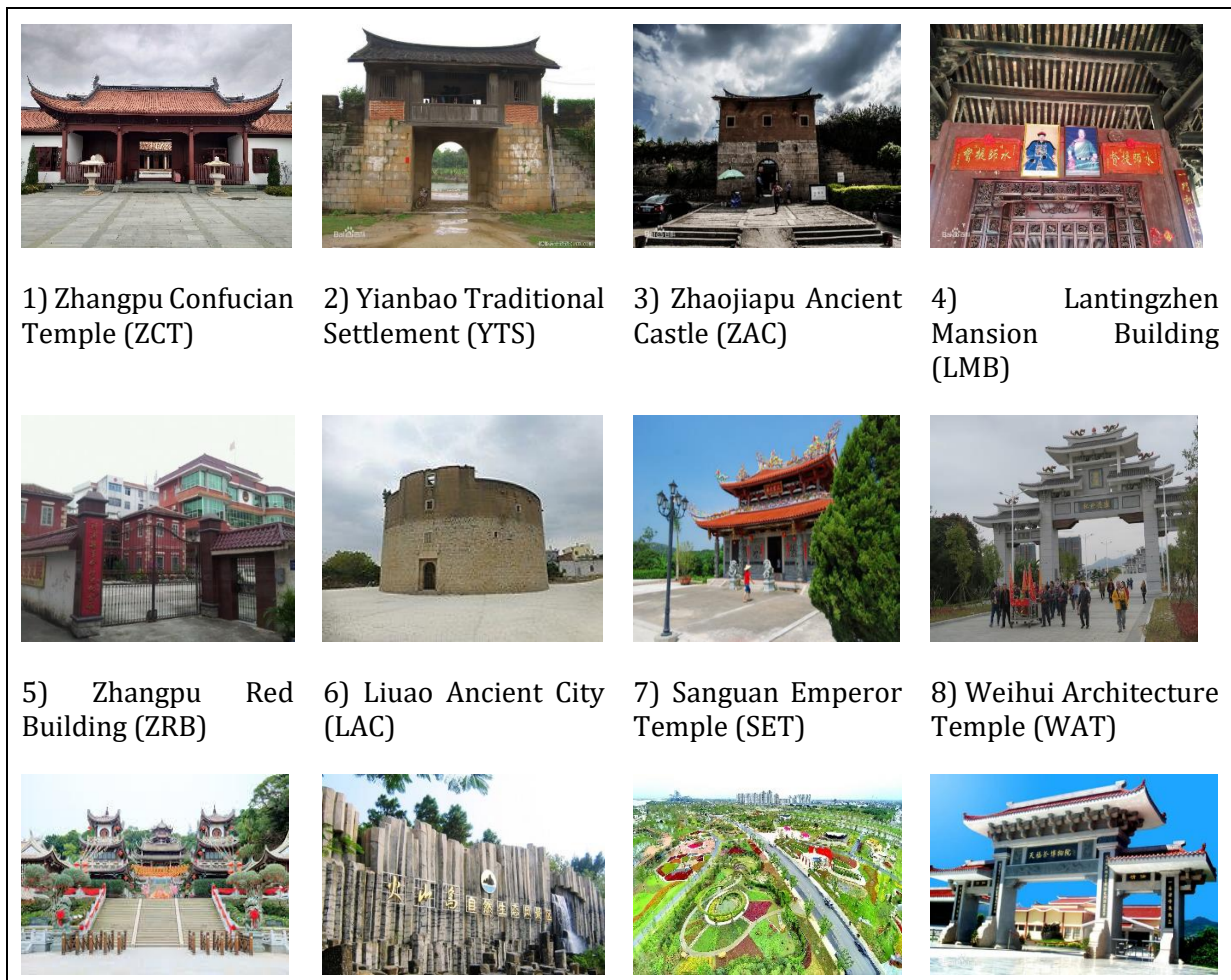
The 30-item Questionnaire on Cultural Paper-making Material Heritage Inventory (QMHI) assessed 50 young and 50 elderly people's perceptions on six scales in five options. Each scale of the QMHAI consists of five items for selecting kinds of plants to make papermaking materials in the Zhangpu landscape areas, namely: *Saccharina Japonica*, *Porphyra Tenera*, Pine tree, Palm Bamboo, Loose-tailed Sunflower, and Mulberry plants' original material scales Very Unrepresentative (1), Slightly Unrepresentative (2), Average Representative (3), More Representative (4), and Very Representative (5), respectively (Figure Caption 6).

The Archaeological Ancient Heritage Asset Attitude (AAHAA)

The notion of archaeological ancient heritage includes structures, constructions, groups of buildings, developed sites, moveable objects, and monuments of other kinds as well as their context, whether situated on Zhangpu County land for the local people and tourism. 50 young and 50 elderly people on their attitudes through the twelve archaeological ancient heritage assets using the 10-item *Archaeological Ancient Heritage Attitude* (AAHA) assessed (Figure Caption 5).

The Paper-Cutting Art Heritage Attitude (PCAHA)

Attitude as a term of fine art refers to the posture or gesture given to a paper-making art by an inventive paper cut to a design sculptor. It applies to the developmental papers from the local conventional plants by Zhangpu communities. Designing the 10-item Paper-Cutting Art Heritage Attitude (PCAHA) assessed 50 young and 50 elderly people and their attitudes toward the Paper-Cutting Art Heritage of the Zhangpu communities' modernized inventive styles were associated (Figure Caption 6).



| | | | |
|----------------------------|---|----------------------------|-------------------------|
| 9) Wushi Mazu Temple (WMT) | 10) Zhangzhou Binhai Volcano National Geopark | 11) Flower Expo Park (FEP) | 12) Tea Expo Park (TEP) |
|----------------------------|---|----------------------------|-------------------------|

Figure Caption 5: Intangible Cultural Heritage Assets at Zhangpu County in Fujian Province
Source: Cui Bao Li (2023)

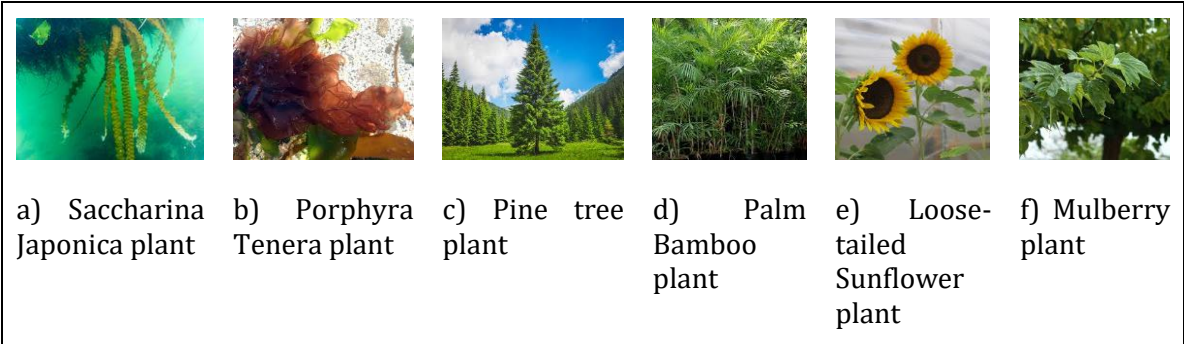


Figure Caption 6: The conventional cultural paper-making material heritage plants to be developed of the modernized paper-making material heritage by the new technology at Zhangpu County in Fujian Province
Source: Cui Bao Li (2023)

Sample Size

Selected 50-personnel young people and 50-personnel elderly people whose ages were 20 years old to 60 years old. The young people’s target was accustomed to using smartphone devices, so the survey can be conducted by electronic questionnaire to shorten the survey process and improve efficiency. Elderly people’s responses to their using smart devices, so they also printed questionnaires for offline use. Most of the sample size involved the paper-cutting art artisans, the inheritance of their perceptions was assessed using the dependent and independent variables by the research questionnaires.

Data Analysis

Internal consistency (Cronbach alpha reliability) efficiency was analyzed by the three research instruments: the QICHAi, the QPMHI, and the PCAHA. Average means were compared, and variables were associated. Simple and multiple correlations are interested in studying the joint effect of independent variables (the QICHAi, and the QPMHI heritage asset sales), and the dependent variable is the mean scores of the AAHAA, and PCAHA. The standardized regression weight validity (β) was the estimated number in the outcome variables for the predictive variables, and the coefficient of determinant predictive value using the R-square statistic determines the proportion of variance in the dependent variable that can be explained by the independent variable to be associated.

RESULTS

Validity and reliability for the QICHAi, QPMHI, AAHAA, and the PCAHA

Because validity is about what a research instrument measures, and how well it does. In contrast, reliability concerns the truthfulness of the data obtained and the degree to which any measuring tool controls random error. Using the Internal consistency (Cornbach alpha reliability) coefficient statistic was analyzed the Validity and reliability of the QICHAi, QPMHI, AAHAA, and PCAHA that reported in Tables 1-4.

Validity and reliability for the QICHAi

The 12-Questionnaire on Intangible Cultural Heritage Asset Inventory (QICHAi) scales assessed the perceptions of 50 young and 50 elderly people on 12 intangible cultural heritage assets, namely: Zhangpu Confucian Temple (ZCT), Yianbao Traditional Settlement (YTS), Zhaojiapu Ancient Castle (ZAC), Lantingzhen Mansion Building (LMB), Zhangpu Red Building (ZRB), Liuaao Ancient City (LAC), Sanguan Emperor Temple (SET), Weihui Architecture Temple (WAT), Wushi Mazu Temple (WMT),

Zhangzhou Binhai Volcano National Geopark (ZBVNG), Flower Expo Park (FXP), and Tea Expo Park (TEP) archaeological ancient heritage asset scales. The results as reported in Table 1.

Table 1: Sample group, scale means' scores, standard deviations, average means scores, scale internal consistency (Cronbach Alpha Reliability) ecoefficiency, F-test, and t-test for the QICHAI.

| Asset scale | Sample group | Scale means | Standard deviation | Cronbach α -reliability | Average means | F-test | t-test |
|-------------|--------------|-------------|--------------------|--------------------------------|---------------|----------|-----------|
| ZTC | Young | 16.920 | 2.155 | 0.758 | 3.384 | 2.662* | -3.948*** |
| | Elderly | 18.880 | 3.054 | 0.688 | 3.776 | 2.548* | |
| YTS | Young | 16.680 | 2.004 | 0.593 | 3.336 | 2.576* | -4.761*** |
| | Elderly | 19.240 | 2.737 | 0.606 | 3.848 | 2.416* | |
| ZAC | Young | 16.000 | 2.407 | 0.747 | 3.200 | 4.541** | -5.092*** |
| | Elderly | 19.060 | 3.365 | 0.734 | 3.812 | 2.649* | |
| LMB | Young | 17.320 | 2.411 | 0.685 | 3.464 | 9.056*** | -3.879** |
| | Elderly | 19.560 | 2.991 | 0.659 | 3.912 | 2.490* | |
| ZRB | Young | 20.400 | 3.010 | 0.708 | 4.080 | 2.858* | 3.662** |
| | Elderly | 18.440 | 2.829 | 0.716 | 3.688 | 3.334* | |
| LAC | Young | 20.620 | 3.238 | 0.816 | 4.124 | 7.012*** | 4.375*** |
| | Elderly | 17.480 | 3.085 | 0.679 | 3.496 | 4.912*** | |
| SET | Young | 19.660 | 2.445 | 0.703 | 3.932 | 3.086* | 1.550 |
| | Elderly | 18.680 | 3.273 | 0.776 | 3.736 | 2.907* | |
| WAT | Young | 19.780 | 2.936 | 0.717 | 3.956 | 2.385* | 2.018* |
| | Elderly | 18.540 | 3.038 | 0.710 | 3.708 | 3.000* | |
| WMT | Young | 18.780 | 3.495 | 0.827 | 3.756 | 3.196* | 0.818 |
| | Elderly | 18.180 | 3.584 | 0.848 | 3.636 | 4.079** | |
| ZBVNG | Young | 18.740 | 2.514 | 0.614 | 3.748 | 2.166* | 2.942** |
| | Elderly | 16.960 | 3.206 | 0.819 | 3.392 | 3.483** | |
| FXP | Young | 19.280 | 3.338 | 0.771 | 3.856 | 2.872* | 3.049** |
| | Elderly | 17.280 | 3.276 | 0.815 | 3.456 | 3.538** | |
| TEP | Young | 18.280 | 3.591 | 0.804 | 3.656 | 4.506** | 3.424** |
| | Elderly | 17.120 | 2.463 | 0.636 | 3.424 | 3.389** | |
| Totalized | Young | 222.460 | 15.354 | 0.844 | 3.708 | 9.465*** | -1.746* |
| | Elderly | 219.450 | 17.084 | 0.850 | 3.657 | 3.195*** | |

$N_1 = 50, N_2 = 50, *p < .05, **p < .01, ***p < .001$

Validity and reliability for the QPMHI

Similarly, the 30-item Questionnaire on the Cultural Paper-making Material Heritage Inventory (QMHI) assessed 50 young and 50 elderly people's perceptions on six scales in five options. Each scale of the QMHI consists of five items for selecting kinds of plants to make papermaking materials in the Zhangpu landscape areas, namely: Saccharina Japonica, Porphyra Tenera, Pine tree, Palm Bamboo, Loose-tailed Sunflower, and Mulberry plants' original material scales. Statistically significant as reported in Table 2.

Table 2: Sample group, scale means' scores, standard deviations, average means scores, scale internal consistency (Cronbach Alpha Reliability) Eco efficiency, F-test, and t-test for the QPMHI.

| Original material scale | Sample group | Scale means | Standard deviation | Cronbach α -reliability | Average means | F-test | t-test |
|-------------------------|--------------|-------------|--------------------|--------------------------------|---------------|-----------|-----------|
| Saccharina Japonica | Young | 19.140 | 3.219 | 0.746 | 3.823 | 5.099*** | -5.129*** |
| | Elderly | 21.720 | 2.215 | 0.719 | 4.344 | 3.235* | |
| Porphyra Tenera | Young | 17.660 | 2.172 | 0.723 | 3.532 | 6.877*** | - |
| | Elderly | 23.640 | 1.548 | 0.670 | 4.728 | 17.832*** | |
| Pine tree | Young | 16.760 | 2.495 | 0.800 | 3.352 | 2.106* | - |
| | Elderly | 22.020 | 2.152 | 0.792 | 4.404 | 2.424* | |
| Palm Bamboo | Young | 19.540 | 2.894 | 0.819 | 3.908 | 55.491*** | -5.479*** |
| | Elderly | 21.7000 | 2.366 | 0.762 | 4.340 | 2.262* | |
| | Young | 18.360 | 3.863 | 0.797 | 3.672 | 5.878*** | -6.891*** |

| | | | | | | | |
|-------------------------|---------|---------|--------|-------|-------|-----------|---------|
| Loose-tailed Sunflower, | Elderly | 22.100 | 1.961 | 0.722 | 4.420 | 3.834** | |
| Mulberry plant | Young | 21.120 | 2.076 | 0.624 | 4.224 | 15.578*** | -2.011* |
| | Elderly | 21.840 | 2.161 | 0.740 | 4.368 | 2.292* | |
| Totalized | Young | 112.580 | 10.140 | 0.812 | 3.753 | 14.544*** | - |
| | Elderly | 133.020 | 10.724 | 0.936 | 4.434 | 7.541*** | |

$N_1 = 50, N_2 = 50, *p < .05, **p < .01, ***p < .001$

Validity and reliability for the AAHAA

The attitudes of 50 young and 50 elderly people toward their intangible cultural heritage assets namely: Zhangpu Confucian Temple (ZCT), Yianbao Traditional Settlement (YTS), Zhaojiapu Ancient Castle (ZAC), Lantingzhen Mansion Building (LMB), Zhangpu Red Building (ZRB), Liuaao Ancient City (LAC), Sanguan Emperor Temple (SET), Weihui Architecture Temple (WAT), Wushi Mazu Temple (WMT), Zhangzhou Binhai Volcano National Geopark (ZBVNG), Flower Expo Park (FXP), West Lake Park (WLP), and Tea Expo Park (TEP) at The Natural Assets are mainly natural landscape at Zhaojiapu County in Fujian Province. The results are reported in Table 3.

Table 3: Sample group, scale means' scores, standard deviations, average means scores, scale internal consistency (Cronbach Alpha Reliability) ecoefficiency, F-test, and t-test for the AAHAA.

| Asset scale | Sample group | Scale means | Standard deviation | Cronbach α -reliability | Average means | F-test | t-test |
|-------------------|--------------|-------------|--------------------|--------------------------------|---------------|----------|--------|
| Ancient attitudes | Young | 37.620 | 6.308 | 0.863 | 3.762 | 2.597* | -0.798 |
| | Elderly | 38.640 | 5.681 | 0.785 | 3.864 | 4.216*** | |

$N_1 = 50, N_2 = 50, *p < .05, **p < .01, ***p < .001$

Validity and reliability for the PCAHA

The attitudes of 50 young and 50 elderly people toward their national and cultural paper-making material assets have used for creative the papers' invention to paper-making art heritage designs from the six plant types namely: Saccharina Japonica, Porphyra Tenera, Pine tree, Palm Bamboo, Loose-tailed Sunflower, and Mulberry plants at Zhaojiapu County in Fujian Province. The results are reported in Table 3.

Table 4: Sample group, scale means' scores, standard deviations, average means scores, scale internal consistency (Cronbach Alpha Reliability) ecoefficiency, F-test, and t-test for the PCAHA.

| Paper-cutting scale | Sample group | Scale means | Standard deviation | Cronbach α -reliability | Average means | F-test | t-test |
|---------------------|--------------|-------------|--------------------|--------------------------------|---------------|----------|-----------|
| Material attitudes | Young | 38.360 | 4.158 | 0.810 | 3.836 | 5.337*** | -6.691*** |
| | Elderly | 43.500 | 4.016 | 0.749 | 4.350 | 7.221*** | |

$N_1 = 50, N_2 = 50, *p < .05, **p < .01, ***p < .001$

The results reported in Tables 1, 2, 3, and 4 show the 50 young and 50 elderly people's responses to their perceptions in terms of scale means' scores, standard deviations, average means scores, scale internal consistency (Cronbach Alpha Reliability), and F-test for the QICHA1 in five items of the 12-QICHA1 scales as reported in Table 1, in five items of six paper-cutting material heritage asset sales for the QPMHI (Table 2), the 10 items for the attitudes of their archaeological ancient heritage assets (Table 3), and the 10 items of their attitudes to their paper-cutting art heritage assets as reported in Table 4. The reliability coefficients for the QICHA1, QPMHI, AAHAA, and PCAHA research instruments are valid and reliable (the α -reliabilities ranged from 0.606 to 0.819, which means a generally accepted rule is that α -reliability of 0.60-0.70 indicates an acceptable level of reliability a greater than 0.80, indicate at a very high-value level for statistically significant (Tavakol & Dennick, 2011)). An F-test is any statistical test used to compare the variances of two samples or the ratio of variances between multiple samples. The test statistic determines the predictive associations between the variables are significant ($p < .05$) for all scales of the QICHA1, QPMHI, AAHAA, and PCAHA scales.

Comparisons between young and elderly people's perceptions of their intangible cultural heritage assets, cultural paper-making materials toward their archaeological ancient heritage assets, and their paper-cutting art material heritage attitudes

The statistic was measured with a t-statistic is a popular statistical tool used to test differences between the average means of two groups: young and elderly people's perceptions for analyzing the inferential statistic used to determine if there is a significant difference between the means of two groups and how they are compared. Comparisons between 50 young and 50 elderly people's perceptions of their intangible cultural heritage assets, cultural paper-making materials toward their archaeological ancient heritage assets, and their paper-cutting art material heritage attitudes. The results are shown in the last columns in Table 1 for the QICHA1, for the QPMHI in Table 2, for the AAHAA in Table 3, and for the PCAHA in Table 4, respectively.

In Table 1, the average scale means for the 50 young people's perceptions ranged from 3.200 (in the Zhaojiapu Ancient Castle Asset) to 4.124 (in the Liuaao Ancient City Asset), and for the elderly people's perceptions ranged from 3.392 (in the Liuaao Ancient City Asset) to 3.912 (in the Lantingzhen Mansion Building Asset). The mean differences between the young and elderly people's responses to the QICHA1 Form (Young-Elderly). Table 1 reveals the differences between the Young and Elderly People Forms for ten of twelve asset scales of the 12-QICHA1 asset scales were statistically significant at the .05 level. In most cases, the average means of the young people's perceptions are higher than the average means of elderly people's responses that would prefer Zhangpu Red Building (ZRB), Liuaao Ancient City (LAC), Weihui Architecture Temple (WAT), Zhangzhou Binhai Volcano National Geopark (ZBVNG), Flower Expo Park (FXP), and Tea Expo Park (TEP) asset scales. However, the young people's perceptions are less than the elderly people on Zhangpu Confucian Temple (ZCT), Yianbao Traditional Settlement (YTS), Zhaojiapu Ancient Castle (ZAC), Lantingzhen Mansion Building (LMB) asset scales are differentiated, significantly. The finding also supports the intangible cultural heritage assets of Sanguan Emperor Temple (SET) and Wushi Mazu Temple (WMT) are non-significant with the t-test analysis. The two totalized profiles related to research in that a variety of this study has indicated that elderly people have more positive opinions of their intangible cultural heritage assets than young people.

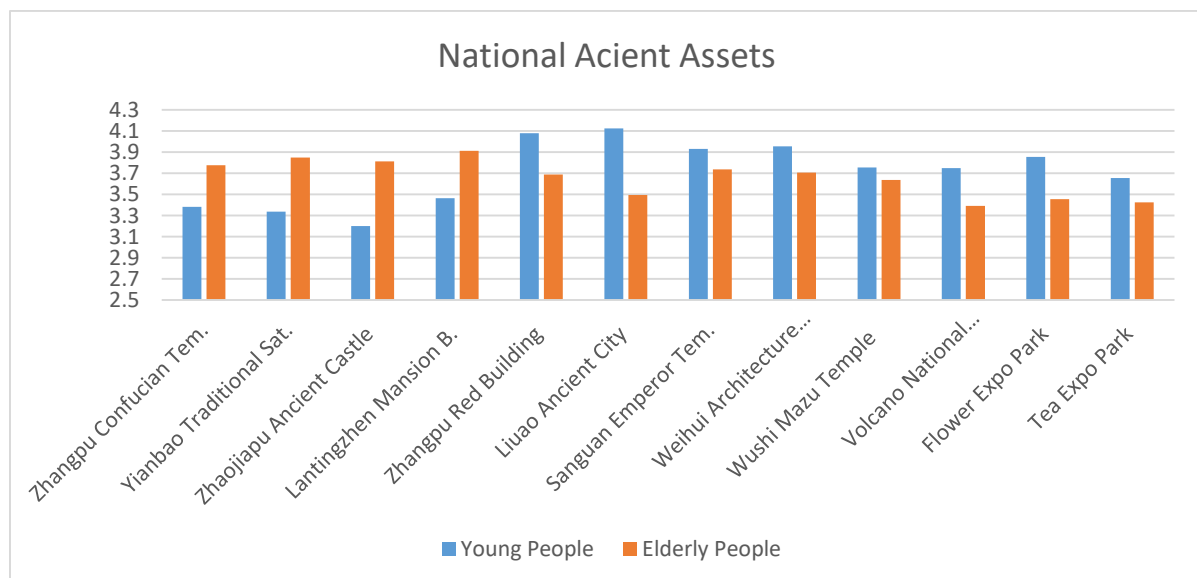


Figure 8: Significant differences between young and elderly people's perceptions of their Zhangpu Intangible Cultural Heritage Ancient Assets' scores on the QICHA1

Figure 8 presents a pictorial comparison of the Young People Form with the Elderly People Form and indicates that elderly people would prefer more than on Zhangpu Confucian Temple (ZCT), Yianbao Traditional Settlement (YTS), Zhaojiapu Ancient Castle (ZAC), Lantingzhen Mansion Building (LMB), Sanguan Emperor Temple (SET), and Wushi Mazu Temple (WMT) ancient heritage assets. However, they would prefer less than Zhangpu Red Building (ZRB), Liuaao Ancient City (LAC), Weihui

Architecture Temple (WAT), Zhangzhou Binhai Volcano National Geopark (ZBVNG), Flower Expo Park (FXP), and Tea Expo Park (TEP) ancient heritage assets.

As reported in Table 2, the scale means ranged from 3.352 to 4.224 on the Young People Form and ranged from 4.340 to 4.728 on the Elderly People Form revealing that the differences between the Young and Elderly People's perceptions of the QPMHI in six scales for the average means of elderly people's responses are higher than on all of *Saccharina Japonica*, *Porphyra Tenera*, Pine tree, Palm Bamboo, Loose-tailed Sunflower, and Mulberry plants' original material for making papers to inventive the paper-cutting art heritage in Zhangpu County of the QPMHI scales were statistically significant at the .05 level for all of six scales.

In most cases, the findings also present a pictorial comparison of the young people's perceptions with the elderly people's perceptions indicating that the average means of elderly people would be greater on *Saccharina Japonica*, *Porphyra Tenera*, Pine tree, Palm Bamboo, Loose-tailed Sunflower, and Mulberry plants' original material for making papers to inventive the paper-cutting art heritage than the young people's responses of their perceptions on the QPMHI plants' original material for making papers' scales. The significant differences between the young and elderly people's perceptions present a pictorial comparison of two sample groups as shown in Figure 9.

Table 3, presents the average means of measuring young and elderly people's attitudes toward the *Archaeological Ancient Heritage Asset Attitude* (AAHAA) are 3.762 and 3.864, respectively. The average means are estimated using paired comparisons between the same AAHAA using a t-test for dependent samples that are not differentiated significantly.

Table 4, reports the average means of measuring young and elderly people's attitudes toward the Paper-Cutting Art Heritage Attitude (PCAHA) are 3.836 and 4.360, respectively. The average means are estimated using paired comparisons between the same PCAHA using a t-test for dependent samples that are differentiated significantly ($p < .001$).

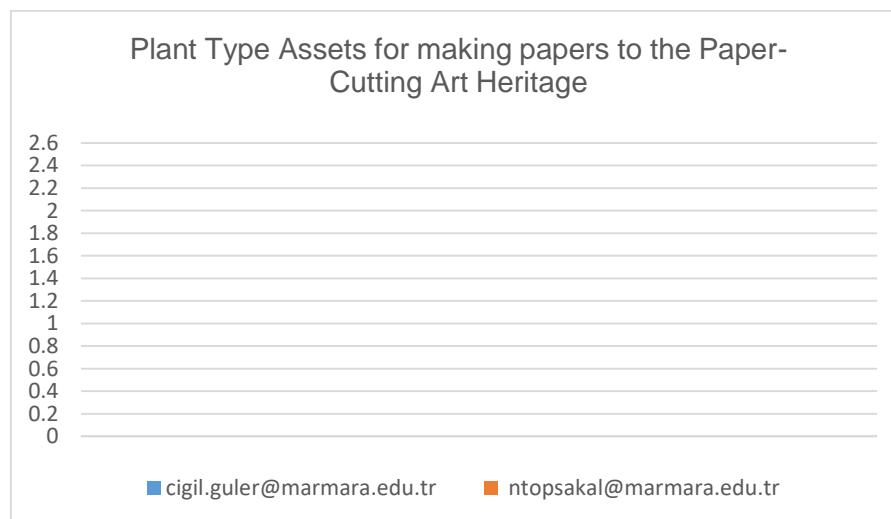


Figure 9: Significant differences between young and elderly people's perceptions of their Zhangpu Natural and Cultural Material Plants for making papers to inventive Paper-Cutting Art Heritage's scores on the QPMHI

Associations Between Young and Elderly People's Perceptions of Intangible Cultural Heritage Ancient Assets (QICHAI) with Archaeological Ancient Heritage Asset Attitudes (AAHAA)

In this study, it was also considered important to investigate associations between young and elderly people's perceptions of their intangible cultural heritage ancient assets (QICHAI) with their archaeological ancient heritage asset attitudes (AAHAA) toward paper-cutting art heritage communities at Zhangpu County the intangible cultural heritage ancient assets. The selection of an evaluation and assessment instrument (QICHAI) suitable for indicating the research objective was required. This suggests that the 12 scales on the QICHAI and the selected AAHAA (α -Reliabilities = 0.863 and 0.785, respectively) are valid and reliable for average means variables of young and elderly people's perceptions (independent variable) and attitudes (dependent variable). Statistically, significance was analyzed with simple and multiple correlations, standardized regression weight

attitude (β), and the coefficient determinant predictive value (R^2). The results are reported in Table 5.

Table 5: Associations between QICHAH Scales and Attitudes (AAHAA) to National and Intangible Cultural Heritage Ancient Assets in terms of simple correlation (r), multiple correlations (R), standardized regression weight attitude (β), and the coefficient determinant predictive value (R^2)

| Ancient Scale | Simple Correlation (r) | | Standardized Regression Weight Attitude (β) | | Multiple Correlation (R) | | Coefficient Determinant Predictive Value (R^2). | |
|---------------|----------------------------|----------------|---|----------------|------------------------------|----------------|---|----------------|
| | Young People | Elderly People | Young People | Elderly People | Young People | Elderly People | Young People | Elderly People |
| ZCT | 0.286* | 0.295* | 0.427** | 0.291* | 0.730** | 0.773** | 0.533** | 0.597** |
| YTS | 0.406** | 0.315* | 0.341** | 0.331* | | | | |
| ZAC | 0.458** | 0.320* | 0.257* | 0.521*** | | | | |
| LMB | 0.387** | 0.322** | 0.589*** | 0.526*** | | | | |
| ZRB | 0.370** | 0.289* | 0.279* | 0.369* | | | | |
| LAC | 0.274* | 0.299* | 0.654*** | 0.388* | | | | |
| SET | 0.416** | 0.458** | 0.306* | 0.569*** | | | | |
| WAT | 0.312* | 0.385** | 0.496** | 0.351* | | | | |
| WMT | 0.293* | 0.399** | 0.555*** | 0.471** | | | | |
| ZBVNG | 0.313* | 0.432** | 0.618*** | 0.285* | | | | |
| FXP | 0.349** | 0.487*** | 0.535*** | 0.443** | | | | |
| TEP | 0.474*** | 0.300* | 0.599*** | 0.304* | | | | |

$N_1 = 50, N_2 = 50, *p < .05, **p < .01, ***p < .001$

As reported in Table 5 which shows statistically significant correlations ($p < .05$) between young and elderly people's perceptions of intangible cultural heritage ancient assets and archaeological ancient heritage asset attitudinal outcomes on all scales of the (QICHAH) were analyzed with simple correlation statistic (r) that means, r is a measure used to determine the strength and the direction of the relationship between two variables, the scales are positive for all scales of the QICHAH. The more conservative standardized regression weight attitude (β) measures the associations between two variables on each scale of the QICHAH and their attitudes towards the twelve intangible cultural heritage ancient assets when the effects are related to the archaeological ancient heritage asset attitude, significantly. A multiple correlation coefficient (R) yields the maximum degree of linear relationship obtained between independent variables and a single dependent variable and the R values indicate at 0.730 and 0.773, there are significant ($p < .05$) associations with the attitude, the coefficient determinant predictive (R^2) values indicate that 53% and 60% of the variance in their attitudes to their twelve intangible cultural heritage ancient assets were attributable to their perceptions for the young and elderly people's responses, respectively.

Associations Between Young and Elderly People's Perceptions of Plant Tyles Cultural Paper-making Material Heritage Assets (QPMHI) with Paper-Cutting Art Heritage Attitudes (AAHAA)

Similarly, it was also considered important to investigate associations between young and elderly people's perceptions of their plant cultural paper-making material heritage assets (QPMHI) with their paper-cutting art heritage attitudes (PCAHA) ((α -Reliabilities = 0.810 and 0.709, respectively) toward paper-cutting art heritage communities at Zhangpu County. The selection of an evaluation and assessment instrument (QPMHI) suitable for indicating the research objective was required. This suggests that the six scales (Saccharina Japonica (SJa), Porphyra Tenera (PTe), Pine Tree (PTr), Palm Bamboo (PBa), Loose-tailed Sunflower (LTs), and Mulberry Plant (MPI)) on the QPMHI are valid and reliable for average means variables of young and elderly people's perceptions (independent variable) and attitudes (dependent variable). Statistically, significance was analyzed with simple and multiple correlations, standardized regression weight attitude (β), and the coefficient determinant predictive value (R^2). The results are reported in Table 6.

As given the results in Table 6, an investigation of the association between young and elderly people's perceptions of plant tyles cultural paper-making material heritage assets (QPMHI) with their paper-cutting art heritage attitudes (AAHAA) to their paper-cutting art heritage at Zhangpu communities was carry out. The simple correlation statistic (r) and the standardized regression weight attitude

(β) measure the associations between two variables on each scale of the QPMHI and their attitudes (PCAHA) towards the six plant material types for making paper to inventive the paper-cutting art heritage are correlated toward the paper-cutting art heritage attitude, significantly. A multiple correlation coefficient (R) yields the maximum degree of linear relationship obtained between independent variables and a single dependent variable and the R values indicate at 0.0.754 and 0.803, there are significant ($p < .05$) associations with the attitude, the coefficient determinant predictive (R^2) values indicate that 53% and 60% of the variance in their attitudes to their twelve ancient intangible cultural heritage assets were attributable to their perceptions, and associate that 57% and 65% of the variance in their attitudes to their six cultural paper-making material heritage were attributable to their perceptions for the young and elderly people's responses, respectively.

Table 6: Associations between QICHA Scales and Attitudes (AAHAA) to National and Intangible Cultural Heritage Ancient Assets in terms of simple correlation (r), multiple correlations (R), standardized regression weight attitude (β), and the coefficient determinant predictive value (R^2)

| Ancient Scale | Simple Correlation (r) | | Standardized Regression Weight Attitude (β) | | Multiple Correlation (R) | | Coefficient Determinant Predictive Value (R^2) | |
|---------------|------------------------|----------------|---|----------------|--------------------------|----------------|--|----------------|
| | Young People | Elderly People | Young People | Elderly People | Young People | Elderly People | Young People | Elderly People |
| SJa | 0.331* | 0.422** | 0.265* | 0.476** | 0.754** | 0.803** | 0.569** | 0.645** |
| Pte | 0.499*** | 0.348** | 0.492** | 0.312* | | | | |
| PTr | 0.489*** | 0.267* | 0.315* | 0.377** | | | | |
| PBa | 0.403** | 0.283* | 0.307* | 0.404** | | | | |
| LtS | 0.364** | 0.421** | 0.331/ | 0.700*** | | | | |
| MPI | 0.486*** | 0.332** | 0.528*** | 0.871*** | | | | |

$N_1 = 50, N_2 = 50, *p < .05, **p < .01, ***p < .001$

DISCUSSIONS

This study focused on the quantitative survey research method of the collection and identification of representative community assets as materials for the design of the Zhangpu paper-cutting pattern, Zhangpu County community assets as materials for paper-cutting pattern design and innovation, have far-reaching significance, not only in the artistic creation itself but also in the community development, cultural inheritance and economic promotion and other components. Integrating the community assets of Zhangpu County into the paper-cutting art, it is possible to create artworks that both retain the traditional charm and conform to the modern aesthetic taste. This innovation can make traditional paper-cutting art closer to their modern life, increase its appeal, attract the interest and participation of the younger and elderly generations, and promote the inheritance of traditional art. Each paper-cutting piece that integrates the assets of the local communities is an expression of Zhangpu's unique culture, enhancing the diversity of culture. This diversity enriches the paper-cutting art itself. The views of people's communities from different backgrounds to understand and appreciate Zhangpu culture by recording Zhangpu's community assets through artistic creation. We are carrying out a cultural preservation activity. As an important form of intangible cultural heritage, the innovation and development of paper-cutting art contribute to the recording and dissemination of the local historical cultures and traditions.

Intangible cultural heritage is the knowledge and traditions inherited from previous generations and passed on to our descendants. It's an important type of heritage that's part of everyone's life in some way. Everybody has intangible cultural heritage (ICH) that's important to them and their communities: from the practical knowledge to create useful things or care for our environment, to the celebrations, music, or stories that have meaning for our lives. Being involved with this heritage can generate well-being, and a sense of belonging and help us to understand other communities. It can connect people to their built and natural environment and be a strong factor in placemaking and economic regeneration. Especially, in part due to the lasting influence of Confucianism, Chinese customs include a strong sense of family, a deep respect for hierarchy, and an appreciation for harmony over conflict. China is a fascinating intersection of ancient cultures and languages with ultramodern infrastructure, innovation, and growth (AFS-USA Intercultural Programs, 2015).

Paper-cutting is the art of paper designs. Art has evolved all over the world to adapt to different cultural styles. One traditional distinction most style share is that the designs are cut from a single sheet of paper instead of multiple adjoining sheets as in the local communities (Sullivan & Murphy, 1996). The oldest examples of paper cuts come from China, (from 750 A.D.) but it is speculated that paper-cutting has been around for much longer but that the examples have been lost, due to paper's delicate nature. Many cultures have developed art based on paper-cutting. Paper cutting can be easily adjusted to fit any age group or skill level (McCracken-Barber, 2013). Nowadays, paper-cutting art has become the mainstream of The Times to attach importance to the development and inheritance of traditional art. The combination of traditional and modern arts of paper-cutting, and the innovative development of a new form of paper-cutting art, can show the characteristics of contemporary art paper-cutting works. the innovation and re-creation of the new paper cutting, and explores the sustainable development direction of the new paper cutting. In the future, Traditional Chinese art will be full of new vitality and have a long history (Qian & Yang, 2022).

A paper's smooth and durable indication is 160 GSM (grams per square metre). High-transparency tracing paper will allow the design to be copied easily and accurately. The smooth surface will mean a pencil will work neatly over it (Read, 2022). However, paper is a thin sheet usually manufactured from cellulose pulp derived from wood and other lignocellulosic materials such as cotton, rice, or wheat straw for writing, printing, and packaging purposes (Hiziroglu, 2016). Raw materials like wood pulp: Bamboo, Salai, and Sabai grass, as well as molasses and bagasse, are essentially for paper production. Due to this, paper-making has become quite a diverse and specialized industry in the country. Therefore, paper is by definition composed of cellulose fibers from plant materials. Thus, rags of natural fibers (cotton, including denim; linen; hemp; ramie) will make the best paper, as opposed to synthetic materials, which do not break down the same way in the beating process (Tasillo, 2021).

Reliability and validity are important aspects of selecting a survey instrument. Reliability refers to the extent that the instrument yields the same results over multiple trials. Validity refers to the extent to which the instrument measures what it was designed to measure. Reliability can be estimated by comparing different versions of the same measurement. Validity is harder to assess, it was estimated by comparing the results to other relevant data or theory. The reliability of an assessment tool is the extent to which it consistently and accurately measures learning. The validity of an assessment tool is the extent by which it measures what it was designed to measure (Bartlett, Kotrlik, & Higgins, 2001). In this research study, the four research instruments, namely: The 60-item *Questionnaire on Intangible Cultural Heritage Asset Inventory* (QICHA) consisted of 12 scales, and the 30-item *Questionnaire on Cultural Paper-making Material Heritage Inventory* (QPMHI) consisted of six scales on five items for each scale. These two research instruments were the independent variables. The 10-item *Archaeological Ancient Heritage Asset Attitude* (AAHAA) and the *Paper-Cutting Art Heritage Attitude* (PCAHA) instruments were dependent variables. These four research instruments assessed two sample groups, 50 youth and 50 elderly people's perceptions in five options. The QICHA, QPMHI, AAHAA, and PCAHA instruments are valid and reliable with the internal consistency (Cronbach alpha reliability) coefficient

The T-test is a common method for comparing the mean of one group to a value or the mean of one group to another. T-tests are very useful because they usually perform well in the face of minor to moderate departures from the normality of the underlying group distributions. In addition to providing the *p*-value information for the appropriate test, assess the variation based on sample estimates, and use this information to provide the amount of evidence of a difference in scale means (NCSS Statistical Software, 2024). Ten of the twelve scales are differentiated significant ($p < .05$) of two groups for the QICHA. All six scales are differentiated for the QPMHI scales, significantly. The average scale means of elderly people are greater than the young people's perceptions of their intangible cultural ancient heritage assets, cultural paper-making material heritage by local raw materials towards their attitudes, significantly.

In the four last decades, research on associations between scale means of independent variables and dependent variables has been popular in survey data on quantitative research methods. The relationship between independent and dependent variables is such that the dependent variable is affected by the independent variable. In other words, the value of the dependent variable depends on the value of the independent scale variables, such as Fisher, Rickards, & Fraser (1999); Fraser,

McRobbie, & Giddings (1993); Hemara, Ketkan, Singchainara, & Santiboon (2021); Prakongsri & Santiboon (2020); Quek, Wong, & Fraser (2002); Santiboon (2015; 2017); Sitthikosol & Malone (2008); Yarrow, Millwater, & Fraser (1997), etc. In this research study, focused on associations between young and elderly people's perceptions of intangible cultural heritage ancient assets (QICHAI) with archaeological ancient heritage asset attitudes (AAHAA), and associations between young and elderly people's perceptions of plant types cultural paper-making material heritage assets (QPMHI) with paper-cutting art heritage attitudes (AAHAA) using the simple and multiple correlations, standardized regression weight validity, and coefficient determination predictive (R^2) values were analyzed. The R^2 values indicate that 53% and 57% of the variance in their attitudes (AAHAA, and PCAHA) to their twelve intangible cultural heritage ancient assets and six cultural paper-making material heritage (QICHAI, QPMHI) were attributable to young people's perceptions are correlated, significantly. Similarly, The R^2 values indicate that 60% and 65% of the variance in their attitudes (AAHAA, and PCAHA) to their twelve intangible cultural heritage ancient assets and six cultural paper-making material heritage (QICHAI, QPMHI) were attributable to elderly people's perceptions are correlated, significantly, respectively.

CONCLUSION

In this quantitative survey research method, appropriate statistical procedures were used, to validate the questionnaires that assessed the 50 young and 50 elderly people's perceptions of their ancient cultural paper-making material heritage assets their cultural paper-making material art heritage toward their archaeological heritage assets, and local material for making papers for inventive paper-cutting art attitudes at Zhangpu Country in Fujian Province, the People Republic of China (PRC) were administered. Designing the four research instruments such as the 60-item *Questionnaire on Intangible Cultural Heritage Asset Inventory* (QICHAI) contained 12 intangible traditional and cultural heritage ancient assets, the 30-item *Questionnaire on Cultural Paper-making Material Heritage Inventory* (QPMHI) included six original plants were made papers for inventive paper-cutting art heritage assets. The 10-item *Archaeological Ancient Heritage Asset Attitude* (AAHAA) and the 10-item *Paper-Cutting Art Heritage Attitude* (PCAHA) variables are modified with those of their attitudes were also associated for indicating these research purposes on five options: Very Unrepresentative (1), Slightly Unrepresentative (2), Average Representative (3), More Representative (4), and Very Representative (5), respectively. Most research instruments are valid and reliable with the internal consistency (Cronbach alpha reliability) coefficient.

Comparisons between young and elderly people's perceptions of their intangible cultural heritage assets, cultural paper-making materials toward their archaeological ancient heritage assets, and their paper-cutting art material heritage attitudes, ten of the twelve intangible cultural heritages of the ancient assets are differentiated significantly at .05, the elderly people's perceptions are greater than the young people's responses for the intangible cultural heritage assets with a t-test analysis. The Elderly people's perceptions of six local cultural plant types for making papers to inventive paper-making art heritage with the Zhangpu artists' local communities indicate that greater than young people's responses of their perceptions' differences are significant. Focused on the archaeological ancient heritage asset and the paper-cutting art heritage attitudes, the elderly people's perceptions are greater the attitudes than the younger people's response outcomes too.

Associations between young and elderly people's perceptions of intangible cultural heritage ancient assets (12-QICHAI ancient assets) with the archaeological ancient heritage asset attitudes-AAHAA, and cultural paper-making material heritage (6-QPMHI plant types) with the paper-cutting art heritage attitude-PCAHA were analyzed with simple correlation (r), the standardized regression weight attitudes (β) are correlated relationships in positive position, significantly. The multiple correlations (R) were significant for the young people and elderly people of the QICHAI and indicated that for the AAHAA at 0.703 and 0.773, respectively. Similarly, the R -correlations indicated the QPMHI toward their PCAHA at 0.754 and 0.803, respectively. The R^2 values indicate 53% and 60% for the QICHAI toward the AAHAA, respectively. Associations between the young people and elderly people's perceptions of the QPMHI toward the PCAHA indicate that 57% and 65% of the variance in their attitudes to their six cultural paper-making material heritage were attributable to their perceptions for the young and elderly people's responses, respectively.

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