
Journal of Creativity Student

<http://journal.unnes.ac.id/journals/jcs>

The Feasibility of Ready-to-Wear Clothing with Bamboo Tree Ideas Source Using Weaving Techniques

Dyah Ayu Nimas Widyaasih¹, Wulansari Prasetyaningtyas^{2*}

¹Universitas Negeri Semarang, Indonesia, <https://orcid.org/0009-0002-9408-514X>

²Universitas Negeri Semarang, Indonesia, <https://orcid.org/0009-0004-3728-5537>

*Corresponding Author: wulan_sari@mail.unnes.ac.id

Abstract

This study aims to evaluate the feasibility of ready-to-wear clothing with bamboo tree ideas through the application of woven techniques as the main element of design. The study used a descriptive quantitative method with assessment by expert panelists and trained panelists. The research instrument included six assessment indicators, namely design, size, sewing technique, aesthetics, fashion performance, and specialty. The validity of the instrument was tested using the Aiken's V index and the reliability using the Intraclass Correlation Coefficient (ICC). Data analysis was carried out through the calculation of the percentage of the eligibility level. The results of the study showed that fashion obtained an average eligibility percentage of 89.71% with the very feasible category. The assessment of expert panelists was 89.33% and trained panelists were 90.09%, both of which were in the very feasible category. These results show that the application of weaving techniques in ready-to-wear clothing is able to provide unique aesthetic value while fulfilling the aspects of construction, comfort, and the function of fashion as a ready-to-wear product.

Keywords: ready to wear, weaving technique, bamboo, fashion eligibility, design evaluation

INTRODUCTION

In this modern era, the existence of bamboo trees in urban areas is decreasing. Bamboo is more often found as a decorative element in urban parks, commercial areas, or just a decorative accent in the yard, no longer as a living landscape that blends into everyday life. This trend is in line with the findings of the study that bamboo crafts and installations are now widely presented in public spaces and cities as an aesthetic element, not as functional equipment as in rural areas¹.

Accelerating urbanization, modernization, and declining interest in the younger generation have made many bamboo weaving traditions face serious threats: the number of artisans is declining, the inheritance process is interrupted, and woven products are losing competitiveness in the modern market². Design innovations present woven bamboo as wall panels, interior partitions, backrests, and chair stands, decorative elements of cabinets, lampshades, and a variety of other household items that combine aesthetic functions and ³expressions. Research shows that bamboo and woven patterns can be processed into textiles, fibers, beads, and woven panels that are applied to contemporary costumes and fashion, while maintaining cultural narratives and cultural values⁴. The use of bamboo as a woven

¹ Shih-hsing Wu, Kuo-kuang Fan, and Chuan-jen Sun, "A Study on the Application of Code Theory in the Decorative Design of Taiwan Bamboo Tube Furniture," 2021.

² Dao Vinh Hop, "Safeguarding Intangible Cultural Heritage in Urbanizing Vietnam: A Case Study of Bamboo Basket Weaving in Xuan Thoi Son," *International Journal of Social Science Exceptional Research*, 2025, 30–39.

³ Kuo-kuang Fan and Yi-ting Chang, "Exploring the Key Elements of Sustainable Design from a Social Responsibility Perspective: A Case Study of Fast Fashion Consumers' Evaluation of Green Projects," 2023.

⁴ Kelrreey Chee, Qian Hwui, and Marzie Hatef Jalil, "Reimagining Indigenous Material Culture: Exploring and Utilizing Bamboo as a Sustainable Approach in Contemporary Costume Design – A Case Study on Marik Empang Beadwork" 25 (2025).

ornament, ranging from household appliances to fashion products, serves a dual purpose: enriching aesthetics and design innovation, as well as maintaining the sustainability of traditional knowledge of weaving to keep alive in the midst of modernity⁵.

The idea of presenting bamboo elements in clothing is relevant as a preservation strategy as well as revitalizing woven crafts in the midst of strengthening the discourse on sustainable fashion. Contemporary designs show that the patterns and textures of woven bamboo that are rich in ecological and cultural significance can be strongly appreciated by the younger generation when applied to modern lifestyle products, as they are seen as environmentally friendly and a fiber of cultural identity. Bamboo woven motifs or structures can be translated into visual inspiration in fashion design, whether through cross-line patterns on textiles, woven panels, or constructive details that mimic the rhythm and density of traditional weaving. For this generation, bamboo is not only perceived as an environmentally friendly material, but also as a marker of cultural identity and closeness to nature that is difficult to find in synthetic materials⁶.

Another innovation is seen in the development of bamboo beads and decorative elements for costumes and accessories, which are able to combine aesthetic values, comfort and the preservation of local heritage⁷. The strategy used in this fashion discussion is to include the structure of the bamboo woven motif in certain parts of the clothing so that the surface of the fabric presents a visual and textural impression that is reminiscent of bamboo woven crafts, without sacrificing comfort and flexibility of movement. Similar approaches have been explored into a variety of fashion and accessories design practices, ranging from the application of woven techniques to collections of bags, shoes, sandals, hats, and other accessories that integrate traditional woven patterns into more modern forms⁸.

The fashion section studied this time applies the weaving technique to the obi part, the bamboo weaving motif is not presented as just a print of an image on the fabric, but translated into a structural ornament that is actually made from pieces of woven fabric, resembling the principle of weave-warp cross-weaving in traditional bamboo weaving. The cross-structure typical of basic weaving is applied through a series of pieces of fabric that are cut lengthwise with a uniform width, then neatly sewn at the edges, arranged cross-sections, and woven one by one to form a three-dimensional layer on the obi part, similar to the process of cross-stacking weaves in bamboo crafts.

The manufacturing process starts from determining the obi pattern on the base fabric, then making a sheet of cloth ribbon that will function as a woven blade. These bands are arranged as warps (base paths) over the obi plane, and then other bands are inserted alternately as feed, raised and lowered in a regular cross pattern until a stable woven plane is formed. Once the composition and density of the webbing are achieved, the arrangement is clamped and sewn at strategic points so that it does not shift, thus forming a layered obi pattern with clear visual volume and rhythm. The exploration of woven ornaments in this obi section at the same time places traditional techniques into the context of contemporary fashion, in line with the trend of product development that raises local motifs and craft processes as aesthetic attractions and affirmations of cultural identity.

Bamboo weaving is not only presented as a decorative motif, but also as a medium to articulate the narrative of local wisdom, the handwork of artisans, and the closeness of humans to natural bamboo materials. The unique aesthetic of the woven can enhance the appeal of the market, while the message of cultural preservation and traditional skills is subtly conveyed to consumers, making modern fashion a bridge between the younger generation and cultural heritage⁹.

The fashion industry is currently recognized as one of the sectors with the most impact on the environment, ranging from the enormous consumption of water and energy, the use of hazardous

⁵ Muxing Gao, Xiaoxiao Cao, and Lihuai Qian, "Cultural Echoes in Modern Design: Assessing Young Consumers' Perceptions of Traditional Bamboo Weaving Patterns," *Complexity* 2024 (2024), <https://doi.org/10.1155/2024/5524490>.

⁶ Muxing Gao, Xiaoxiao Cao, and Lihuai Qian, "'Cultural Echoes in Modern Design: Assessing Young Consumers' Perceptions of Traditional Bamboo Weaving Patterns'" 2024 (2024).

⁷ Chee, Hwui, and Jalil, "Reimagining Indigenous Material Culture: Exploration and Utilizing Bamboo as a Sustainable Approach in Contemporary Costume Design – A Case Study on Marik Empang Beadwork."

⁸ Yifei Cai et al., "Exploration of the Innovative Development Path of Bamboo Weaving and Fashion Design in the Background of Intangible Cultural Heritage" 6, no. 5 (2024): 14–23, <https://doi.org/10.25236/FAR.2024.060503>.

⁹ Jalil, "Weaving a Greener Tomorrow: A Mini Review of Bamboo Fiber, Textiles and Hand-Woven Techniques for Sustainable Innovation."

chemicals in the spinning, dyeing, and finishing processes, to the accumulation of textile waste and significant greenhouse gas emissions¹⁰. Fast fashion practices accelerate the production-consumption cycle, driving massive production of clothes with short lifespans, resulting in millions of tons of clothes ending up in landfills, burning, or polluting aquatic and land ecosystems¹¹. This condition raises the urgency of a paradigm shift towards sustainable fashion, which emphasizes the selection of environmentally friendly materials, waste reduction, energy efficiency, and a cleaner and more transparent production process along the supply chain. So designers are required to integrate sustainable design elements from the initial stage, starting from fiber selection, construction methods, to end-of-life strategies of products, so that the resulting clothing is not only visually appealing, but also ecologically and socially responsible¹².

Developments in the fashion industry show that ready-to-wear fashion is one of the important parts that will continue to grow because it is able to answer people's needs for clothes that are practical, comfortable, and easy to obtain, but still have aesthetic value. The emergence of mass production since the industrialization era has made ready-to-wear a form of clothing designed with relatively uncomplicated patterns, produced in standard sizes, and can be worn directly without a lengthy adjustment process, thus matching the dynamic modern lifestyle¹³. The design of this ready-to-wear fashion prioritizes user comfort and functionality while still considering aesthetic values¹⁴. The solution between daily functional needs and the desire to look stylish, in line with the development of functional clothing that combines comfort, practicality, and flexibility of use in various situations, ready-to-wear clothing now explores silhouettes, details, material selection, and surface processing techniques to produce clothing that is functional while having aesthetic value and visual uniqueness. This confirms that ready-to-wear fashion is not just a mass product, but also a creative space that combines aspects of function, comfort, aesthetics, and conceptual added value¹⁵.

In accordance with the above study, this study aims to comprehensively evaluate the feasibility of ready-to-wear clothing with the source of bamboo tree ideas which is realized through the application of weaving techniques in fashion design. The feasibility of fashion is not only reviewed from the aspect of external appearance, but also from the quality of construction and function as a ready-to-use fashion product. Thus, the results of the study are expected to provide an objective picture of the feasibility of ready-to-wear clothing based on bamboo tree inspiration and weaving techniques as products that are worthy of further development.

METHOD

This study uses a descriptive method with a quantitative approach. The quantitative descriptive method is a research method that aims to describe or explain a phenomenon, situation, or object systematically and factually by using dynamic numerical data through statistical techniques¹⁶. This method was chosen because it is suitable for describing systematically and measurably, as respondents assess the quality and feasibility of a fashion product based on numerical data¹⁷. The quantitative descriptive approach is widely used in textile clothing product evaluation studies to determine consumer perceptions of quality attributes, such as appearance, neatness, cut, and suitability, by

¹⁰ Sofia Plakantonaki et al., "A Review of Sustainability Standards and Ecolabeling in the Textile Industry," 2023, 1–18.

¹¹ Patsy Perry, "The Environmental Price of Fast Fashion," 2020, 189–200, <https://doi.org/10.1038/s43017-020-0039-9>.

¹² Fan and Chang, "Exploring the Key Elements of Sustainable Design from a Social Responsibility Perspective: A Case Study of Fast Fashion Consumers' Evaluation of Green Projects."

¹³ Carolina Gomes et al., "Empowering Green Choices: An Environmental Impact Assessment Decision Support System for Textiles and Clothing," 2024.

¹⁴ Neneng Dela et al., "Marbling and Written Batik for Casual Clothing," 2024, 53–66.

¹⁵ Berare Zekina Lestari et al., "Design and Material Innovation: Global Quality Local Fashion" 3, no. 2 (2025): 57–63.

¹⁶ Aida, Dina Hermina, and Norlaila, "'Types of Quantitative Research Data (Correlated, Comparative, and Experimental)'" 10, no. 1 (2025): 31–40.

¹⁷ Yola Rahmadiani, Wesnina, and Eneng Lutfita Zahra, "'Consumer Preferences in Fashion Images'" 3, no. 1 (n.d.): 17–22.

calculating the average score and distribution of respondents' answers¹⁸.

The quantitative descriptive method was used to describe in detail and assess the feasibility level of ready-to-wear clothing with bamboo tree ideas that applied weaving techniques. The assessment is carried out based on data in the form of numbers obtained through structured assessment instruments, so that every aspect of fashion feasibility can be measured systematically and objectively.

This research involves 3 expert panelists who are designers with competence in the field of fashion and 2 expert panelists who are experienced teachers in the field of fashion, so that the assessment provided provides a strong professional and academic foundation. In addition, 15 trained panelists also participated in the assessment process. The trained panelists are students who have passed the Women's Fashion Production and Adi Busana Production Courses, so that they have adequate knowledge and technical skills to assess the feasibility of fashion. The use of numerical data in this study is in line with the practice of evaluating fashion products that combine the perception and experience of the assessor into the form of a measurable score, so that the feasibility of the product can be described more objectively.

The ready-to-wear fashion feasibility assessment instrument with bamboo tree ideas and weaving techniques is prepared as a structured rubric that contains 6 main indicators, namely design, size, sewing techniques, aesthetics, fashion performance, and specialties. Each indicator is outlined into 5 specific sub-indicators. Each sub-indicator is then further elaborated into 6 aspects of operational assessment which are assessed using a numerical scale, so that the total assessment items are very detailed and allow the assessment of the feasibility of the fashion to be carried out thoroughly. The development of assessment instruments that require clarity of indicators, conformity of aspects with the purpose of the product, and ease of use for assessors to produce instruments that are valid and suitable for use.

Before being used in data collection activities, the assessment instrument is first systematically compiled and tested for its validity. This test is carried out to ensure that each question item contained in the instrument truly represents the indicators of the suitability of the clothing to be measured. The validity used is content validity, which is a type of validity that emphasizes the suitability between the content of the instrument and the aspects that are the basis for measuring the feasibility of clothing.

The assessment of the validity of the content is carried out through the involvement of experts as validators who are asked to review and give consideration to each item of the statement based on the indicators that have been set. Through this process, the validators assessed whether each instrument item was relevant, representative, and adequate to measure the feasibility aspects of ready-to-wear fashion. The validity of the content serves not only as a form of technical testing, but also as a guarantee that the instrument used has a strong conceptual foundation that is used as a measuring tool in research. The data obtained from the assessment of the validators was then analyzed using the Aiken's V index with the following formula:

$$N = \frac{\sum s}{n(c-1)}$$

Source: (Prasetyaningtyas et al., 2024)

Description:

- V = Aiken validity index
- S = r – lo
- The = lowest validity rating number (e.g. 1)
- C = the highest validity rating (e.g. 5)
- n = number of raters
- r = the number given by the assessor

The interpretation criteria used in this study stipulate that each item of the instrument is declared valid if the value of Aiken's coefficient V meets the minimum limit of $V \geq 0.75$ with a probability of 0.41. This criterion is used as a basis for assessing the degree of conformity of each item to the measured indicator. Based on the results of the validity test using the Aiken's V formula, it was

¹⁸ Harun Alhassan, Nitette Afi Appiah, and Boateng Kojo Ankai, "Quality Attributes: Consumers' Evaluation of Tailored Clothing in Ghana" 6, no. 1 (2023): 1–24.

obtained that the V_{hitung} value of all 30 statements was in the range of ≥ 0.75 ¹⁹. This shows that each statement item has met the content validity standard, thus, all items of the instrument are declared suitable for use as a data collection tool in this study.

Furthermore, the reliability test of the instrument was carried out using the *Intraclass Correlation Coefficient* (ICC) technique. This reliability test aims to determine the consistency and agreement of the assessment between raters on all instrument items. The use of ICC allows researchers to assess the extent to which the instrument produces a stable assessment even though it is used by different assessors. The results of the reliability calculation are shown in the following table 1:

Table 1. Intraclass Correlation Coefficient							
	Intraclass Correlation ^b	95% Confidence Interval		F Test with True Value o			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measure	.926a	.835	.948	45.365	29	174	.000
Average Measure	.978c	.956	.972	45.365	29	174	.000

Based on table 1, an ICC Average Measure value of 0.978 with a significance level of 0.000 was obtained, which is included in the category of very high reliability. This value shows that the average assessment results given by the raters have a very strong level of consistency. Meanwhile, the ICC Single Measure value of 0.926 indicates that the reliability of the assessment on each rater individually is also in the very good category. Referring to the ICC's interpretation criteria, values that are in the range of 0.75 to 1.00 reflect the excellent quality of the ²⁰estimates. Therefore, it can be concluded that the assessment instruments used have high internal consistency and are reliable to measure the feasibility of fashion objectively and stably.

Data analysis in this study was carried out to calculate the average value of the percentage of eligibility level in each indicator. Percentage calculation refers to a general formula, which is a comparison between the score obtained and the ideal score multiplied by 100%,²¹ so that quantitative data can be interpreted more clearly and measurably. The data is presented visually and numerically to facilitate reading, comparison, and interpretation of research results.

$$P = \frac{f}{N} \times 100\%$$

Source: (Abdullah et al., 2024)

- P = percentage of eligibility
 F = total score obtained
 N = maximum total score

Furthermore, the percentage of each indicator is classified into the categories of feasibility level, i.e. very feasible, feasible, moderately feasible, less feasible, and very unfeasible, in order to provide a comprehensive picture of the feasibility of the product being studied and facilitate the drawing of conclusions.

Table 2. Eligibility Categories		
Yes	Percentage	Categories
1.	85% – 100%	Highly Worth It
2.	69% – 84%	Worthy
3.	45% – 68%	Quite Decent
4.	37% – 52%	Less Worthy
5.	20% – 36%	Very Unworthy

¹⁹ Wulansari Prasetyaningtyas, Widiastuti Widiastuti, and Edi Istiyono, "Development of Learning Outcomes Assessment Instrument for Fashion Technology Courses," (*Atlantis Press SARL*), 2024.

²⁰ Wulansari Prasetyaningtyas and Sri Wening, "Needs Analysis to Develop a Practice Assessment Instrument for Learning Process During Covid-19 Pandemic" 640, no. *Iccie* (2021): 307–11.

²¹ Suggestion, "*Quantitative, Qualitative, Dab R&D Research Methodology*" (Alfabeta Bandung, 2020).

RESULTS AND DISCUSSION

Feasibility Evaluation Results

This study is generally aimed at evaluating the feasibility level of ready-to-wear clothing that applies weaving techniques, by referring to the assessment of expert panelists and trained panelists based on six assessment indicators that have been tested for validity and reliability. The results of the assessment given by all panelists are then processed in the form of percentages, so that a feasibility score is obtained for each indicator and as a whole. The percentage is presented systematically in table 3 which contains an analysis of the feasibility of clothing.

Table 3. Feasibility Evaluation Results

Yes	Indicator	Expert Panelists	Trained Panelists	Average
1	Design	15,33%	14,27%	14,80%
2	Size	15,33%	15,33%	15,33%
3	Aesthetics	12,53%	15,60%	14,07%
4	Sewing Techniques	15,47%	14,13%	14,80%
5	Fashion Performance	15,20%	15,42%	15,31%
6	Privileges	15,47%	15,33%	15,40%
Total		89,33%	90,09%	89,71%

Referring to the data presented in table 3, the results of the feasibility assessment of ready-to-wear clothing with the application of weaving techniques based on six main indicators show an average percentage value of 89.71%, so it can be categorized as very feasible. When reviewed by the assessment group, expert panelists gave a feasibility score of 89.33%, while trained panelists gave a slightly higher score, which was 90.09%. Despite the differences in scores between the two groups, the relatively small difference shows that in general the two types of panelists have a high level of agreement in assessing the suitability of the fashion and that all the results of the assessment remain in the very feasible category.

The differences in scores that arise can be understood as a consequence of differences in background, experience, and viewpoints in the evaluation process. Expert panelists tend to make judgments based on longer professional experience, with a strong focus on technical aspects, construction quality, precision of engineering application, as well as fashion design principles. In contrast, trained panelists base their assessments more on conceptual and academic understandings of the feasibility, quality, and function of fashion acquired during the formal learning process. This difference in orientation is natural in fashion research, given that each group of assessors brings a different frame of mind and evaluation standards even though they refer to the same instrument²².

In line with research findings in the evaluation of fashion and textile products, the involvement of panelists with special competencies provides a stronger and more reliable foundation in assessing the quality and feasibility of a product. The combination of these two groups allows the evaluation process to be carried out more comprehensively, because it includes the perspective of industry professionals, including in the context of the application of weaving techniques in ready-to-wear clothing²³. In order to discuss the evaluation of the suitability of clothing in more depth, the following is a design of ready-to-wear clothing presentations with the application of weaving techniques that are the object of research:

²² Linna Hu, May Boggess, and Mardelle M Shepley, "Comparing Expert, Quasi-Expert, and Novice Evaluations of Award-Winning Design Products Using the Consensual Assessment Technique ABSTRACT," *Creativity Research Journal* 35, no. 4 (2023): 730–48, <https://doi.org/10.1080/10400419.2022.2157591>.

²³ Linna Hu, May Boggess, and M. Mardella Shepley, "Comparing Expert, Quasi-Expert, and Novice Evaluations of Award-Winning Design Products Using the Consensual Assessment Technique," *Creativity Research Journal* 35, no. 4 (2022): 730–48.



Figure 1. Ready-to-Wear Fashion Presentation Design with Weaving Techniques



Figure 2. Ready-to-Wear *Fashion Finish* with Weaving Technique

Based on table 3 of the results of the feasibility evaluation, it can be seen that the privilege indicator obtained the highest score, which was 15.40%. These results indicate that the special aspect of ready-to-wear clothing with the application of weaving techniques is perceived to be very prominent and considered very feasible by expert panelists and trained panelists. The speciality here is not only related to the different visual appearance, but also concerns the aesthetic value, originality of the design, and the unique character that distinguishes the fashion from ready-to-wear products in general²⁴.

The assessment points of "fashion shape and structure innovation" and "use of materials or textures" indicate that the process of exploring woven shapes and techniques has resulted in attractive designs, but still requires refinement in woven construction and material selection. Improvements need to be directed at the total weight of the clothing, flexibility, and the ability of the material to follow the movements so that the woven technique still feels light and does not burden the wearer, in line with the basic character of ready-to-wear clothing that emphasizes comfort, practicality, and ease of use. Shape and texture innovation through weaving techniques must be controlled through periodic evaluation of fabric weight, thickness, structure density, and thermophysiological properties (air circulation, moisture management, and tactile sensation) so that the final result still meets daily comfort standards²⁵.

The aesthetic indicator found the lowest score, which was 14.07%, but it was still in the very feasible category which showed that the clothes discussed in this study still met the fashion feasibility

²⁴ Dede Ananta and K Perangin Angin, "Implementation of Weaving Techniques in Fashion Men's Ready To Wear Products" 7, no. 1 (2023): 118–26.

²⁵ Julia Wilfling et al., "Consumer Expectations and Perception of Clothing Comfort in Sports and Exercise Garments," no. January (2026): 293–309, <https://doi.org/10.1108/RJTA-01-2021-0015>.

standards in the question item "colors support each other", the assessment showed that the choice of fabric colors was quite harmonious and did not produce excessive contrast, so as not to interfere with visual comfort. In aesthetic theory, the harmony of colors and visual composition that complement each other is one of the conditions for creating a beautiful and pleasant impression for the observer²⁶. However, in the question item "fashion appearance gives a harmonious impression", a lower score indicates an imbalance of form and volume, especially in the woven part of obi. This part is considered to be very visually heavy so that it does not blend with the overall silhouette of the fashion, disrupting the principle of harmony and unity in the design composition.

The design indicator obtained a score of 14.80% which is still in the category of very feasible showing that in general the fashion design has met the design feasibility standards, but the panelists' findings on the question item "ornament is not excessive and does not disturb the design balance" indicates that there are specific problems in the aspect of ornament suitability. The panelists considered that the sequin ornament on the pants was not suitable because the color of the sequins tended to "die" when placed on brick-red fabric, so that the existence of the ornament was not clearly visible and failed to function as an aesthetic support. Fashion design and ornamentation should act as an affirmation, center of interest, or reinforcement of visual identity, not just an illegible paste. The application of decoration needs to consider the principles of unity, balance, and proportion, including the relationship between the shape of the ornament, its placement on the body, and the resulting visual effect²⁷.

The size indicator with a score of 15.33% which is still in the category of very feasible shows that in general the size of ready-to-wear clothing with the application of woven techniques is in accordance with the proportions of the model's body, but there are still technical details that need to be improved, especially related to wrinkles in clothing. This suggests that the overall pattern construction and sewing process are quite appropriate, but there are still adjustments needed to make the clothes neater and more optimal. In the theory of pattern making, a good fashion size should be a trace of the body shape that is drawn according to the body size carefully and precisely, so that when fitting is done, the clothes follow the shape of the body without causing unwanted pulls or wrinkles²⁸.

The sewing technique indicator obtained a score of 14.80% which is still included in the very feasible category, thus showing that the quality of sewing work on clothing is at a very good level. These results indicate that the fashion construction process has been carried out by paying attention to the basic principles of sewing techniques, especially from the aspects of neatness, precision, and consistency of sewing results, which are fundamental elements in determining the quality of fashion products. Good stitch quality not only affects the visual appearance, but is also directly related to the strength of the structure, comfort of wearing, and durability of the fashion in long-term use. In the assessment item "consistent stitch spacing", results were obtained that showed the absence of thread jumping and the suitability of the thread color with the fabric. These findings indicate that the sewing process was carried out in a controlled manner and followed the correct technical standards. This means that the technical aspect of the seam is not just an aesthetic detail, but a structural element that determines the durability and comfort of the garment when²⁹ worn.

The fashion performance indicator obtained a score of 15.31%, which shows that ready-to-wear clothing with the application of weaving techniques is considered to be able to provide a good level of comfort and stability when worn. These results indicate that functionally fashion has met the basic characteristics of a ready-to-use product, namely that it can be used comfortably, does not interfere with the user's activities, and is able to maintain its shape and structure during the wearing process. The question item "clothes are easy to wear and take off" and "give a polite and professional impression", the panelists assessed that the direction of the opening on the woven obi still needs help during the wearing process because it uses a strapless opening on the back. This is in line with the wearability approach in contemporary fashion studies, which emphasizes that in addition to the

²⁶ Vita Wulansari and I Gede Jaya Putra, "'Eco Design Aesthetics in the Angel of Rubbish's Women's Fashion Work,'" *Da Moda Journal* 4, no. 2 (2023): 65–72.

²⁷ Riza Afrilia and Cucu Ruhidawati, "'Application of Ribbon Quilling Sakura Flower Embellishment on Daytime Party Dress as a Center of Interest,'" *Journal of Fashion and Fashion Technology* 13, no. 2 (2025): 99–107.

²⁸ Nurul Hidayah and Yasnidawati, "Preparation of Basic Patterns of Indonesian System Fashion for Indonesian Women with Fat Body Shape," *Gorga Journal of Fine Arts* 08, no. 1 (2019).

²⁹ Nusrat Tahmida Hossain, "Impact of Various Stitch Classes and Seam Types on Seam Strength" IX, no. 2454 (2025): 2045–53, <https://doi.org/10.47772/IJRISS>.

technical aspects, fashion must be able to achieve social appropriateness — that is, the ability of clothing to create visual cues that are appropriate for a particular social context, such as professionalism or formality³⁰. This perspective confirms that performance is not just about ease of use, but also how well the fashion communicates visually to the social code of use.

Based on the overall results of the feasibility analysis using six assessment indicators, it can be concluded that *ready-to-wear* clothing with the application of woven techniques has met the design feasibility standards set. The assessment of expert panelists and trained panelists shows that the product is not only aesthetically feasible, but also of good quality in terms of function, comfort, and construction, so that it can be categorized as a quality ready-to-wear clothing that is worthy of development. The six indicators complement each other in affirming the success of design, both in terms of visual appearance, uniqueness, technical performance, and ease of movement, in line with fashion design theory which states that the success of *ready-to-wear design* is determined by the integration between aesthetics, comfort, and technical performance³¹.

CONCLUSION

Based on the results of the study, ready-to-wear clothing with bamboo tree ideas through the application of weaving techniques was declared very feasible with an average percentage of 89.71%. These results show that the fashion has met the feasibility standards as a ready-to-use product in terms of design, size, sewing technique, aesthetics, fashion performance, and specialties. The assessment of expert panelists of 89.33% and trained panelists of 90.09% were both in the very feasible category, with a small percentage difference that shows the consistency of assessments between groups.

REFERENCES

- Afriliah, Riza, and Cucu Ruhidawati. "Application of Ribbon Quilling Sakura Flower Embellishment on Daytime Party Dress as a Center of Interest." *Journal of Fashion and Fashion Technology* 13, no. 2 (2025): 99–107.
- Aida, Dina Hermina, and Norlaila. "Types of Quantitative Research Data (Correlated, Comparative, and Experimental)" 10, no. 1 (2025): 31–40.
- Alhassan, Harun, Nitette Afi Appiah, and Boateng Kojo Ankai. "Quality Attributes: Consumers' Evaluation of Tailored Clothing in Ghana" 6, no. 1 (2023): 1–24.
- Ananta, Dede, and K Perangin Angin. "Implementation of Weaving Techniques in Fashion Men's Ready To Wear Products" 7, no. 1 (2023): 118–26.
- Cai, Yifei, Jiaqi Huo, Hongjie Zhang, and Lejun Wang. "Exploration of the Innovative Development Path of Bamboo Weaving and Fashion Design in the Background of Intangible Cultural Heritage" 6, no. 5 (2024): 14–23. <https://doi.org/10.25236/FAR.2024.060503>.
- Chee, Kelreedy, Qian Hwui, and Marzie Hatef Jalil. "Reimagining Indigenous Material Culture: Exploration and Utilizing Bamboo as a Sustainable Approach in Contemporary Costume Design – A Case Study on Marik Empang Beadwork" 25 (2025).
- Dela, Neneng, Amelia Asep, Miftahul Falah, Saftiyaningsih Ken, Atik Komarudin, Craft Study Program, and Faculty of Social Studies. "Marbling and Written Batik for Casual Wear," 2024, 53–66.
- Fan, Kuo-kuang, and Yi-ting Chang. "Exploring the Key Elements of Sustainable Design from a Social Responsibility Perspective: A Case Study of Fast Fashion Consumers' Evaluation of Green Projects," 2023.
- Gao, Muxing, Xiaoxiao Cao, and Lihuai Qian. "Cultural Echoes in Modern Design: Assessing Young Consumers' Perceptions of Traditional Bamboo Weaving Patterns" 2024 (2024).
- Gomes, Carolina, Irina Pires, Leave Me, Monteiro, Titunia M Lima, and Pedro D Gaspar. "Empowering Green Choices: An Environmental Impact Assessment Decision Support System for Textiles and Clothing," 2024.
- Hidayah, Nurul, and Yasnidawati. "Preparation of Basic Patterns of Indonesian Fashion System for Indonesian Women with Fat Body Shapes." *Gorga Journal of Fine Arts* 08, no. 1 (2019).
- Hop, Dao Vinh. "Safeguarding Intangible Cultural Heritage in Urbanizing Vietnam: A Case Study of

³⁰ Kristin Lee et al., "Perceptions of Ethicality: The Role of Attire Style, Attire Appropriateness, and Context," *Journal of Business Ethics*, no. 0123456789 (2023), <https://doi.org/10.1007/s10551-023-05347-7>.

³¹ Ela Nurlita and Yasnidawati Yasnidawati, "Analysis of Cowl Drapery Making with Draping Techniques in Clothing," *Fashion and Fashion Education Journal* 10, no. 2 (2021): 58–62.

- Bamboo Basket Weaving in Xuan Thoi Son." *International Journal of Social Science Exceptional Research*, 2025, 30–39.
- Hossain, Nusrat Tahmida. "Impact of Various Stitch Classes and Seam Types on Seam Strength" IX, no. 2454 (2025): 2045–53. <https://doi.org/10.47772/IJRISS>.
- Hu, Linna, May Boggess, and M. Mardella Shepley. "Comparing Expert, Quasi-Expert, and Novice Evaluations of Award-Winning Design Products Using the Consensual Assessment Technique." *Creativity Research Journal* 35, no. 4 (2022): 730–48.
- Hu, Linna, May Boggess, and Mardelle M Shepley. "Comparing Expert, Quasi-Expert, and Novice Evaluations of Award-Winning Design Products Using the Consensual Assessment Technique ABSTRACT." *Creativity Research Journal* 35, no. 4 (2023): 730–48. <https://doi.org/10.1080/10400419.2022.2157591>.
- Jalil, Marzie Hatef. "Weaving a Greener Tomorrow: A Mini Review of Bamboo Fiber, Textiles and Hand-Woven Techniques for Sustainable Innovation" 33, no. 3 (2025): 1661–81.
- Lee, Kristin, Sotak Andra, Serban Barry, and A Friedman Michael. "Perceptions of Ethicality: The Role of Attire Style , Attire Appropriateness, and Context." *Journal of Business Ethics*, no. 0123456789 (2023). <https://doi.org/10.1007/s10551-023-05347-7>.
- Lestari, Berare Zekina, Puja Zakti Nur Alifah, Putri Widyawati, and Risbon Sianturi. "Design and Material Innovation: Global Quality Local Fashion" 3, no. 2 (2025): 57–63.
- Nurlita, Ela, and Yasnidawati Yasnidawati. "Analysis of Cowl Drapery Making with Draping Techniques in Clothing." *Fashion and Fashion Education Journal* 10, no. 2 (2021): 58–62.
- Perry, Patsy. "The Environmental Price of Fast Fashion," 2020, 189–200. <https://doi.org/10.1038/s43017-020-0039-9>.
- Plakantonaki, Sofia, Kyriaki Kiskira, Nikolaos Zacharopoulos, Ioannis Chronis, Fernando Coelho, Amir Togiani, Konstantinos Kalkanis, and Georgios Priniotakis. "A Review of Sustainability Standards and Ecolabeling in the Textile Industry," 2023, 1–18.
- Prasetyaningtyas, Wulansari, and Sri Wening. "Needs Analysis to Develop a Practice Assessment Instrument for Learning Process During Covid-19 Pandemic" 640, no. Iccie (2021): 307–11.
- Prasetyaningtyas, Wulansari, Widiastuti Widiastuti, and Edi Istiyono. "'Development of Learning Outcomes Assessment Instrument for Fashion Technology Courses.'" (*Atlantis Press SARL*), 2024.
- Rahmadianti, Yola, Wesnina, and Eneng Lutfita Zahra. "'Consumer Preferences in Fashion Images'" 3, no. 1 (n.d.): 17–22.
- Sugiyono. *"Quantitative, Qualitative, Dab R&D Research Methodology."* Alfabeta Bandung, 2020.
- Wilfling, Julia, George Havenith, Adidas Ag, and Simon Hodder. "Consumer Expectations and Perception of Clothing Comfort in Sports and Exercise Garments," no. January (2026): 293–309. <https://doi.org/10.1108/RJTA-01-2021-0015>.
- Wu, Shih-hsing, Kuo-kuang Fan, and Chuan-jen Sun. "A Study on the Application of Code Theory in the Decorative Design of Taiwan Bamboo Tube Furniture," 2021.
- Wulansari, Vita, and I Gede Jaya Putra. "'Eco Design Aesthetics in Angel of Rubbish's Women's Fashion Work.'" *Da Moda Journal* 4, no. 2 (2023): 65–72.