



Published online: 30/06/2025

Values Behind Circular Consumption - A Comparison Between Thailand and Laos

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Paper type: Research paper

Abstract

Purpose – The Authors investigate how open consumers are in Thailand and Laos for consumption solutions of fashion products supporting the circular economy and what the relationships are between their behavior and cultural values; additionally, they compare the characteristics of the two countries' respondents.

Design – The study utilizes a quantitative approach. Based on the literature background, a questionnaire was compiled and completed by 62 respondents from Laos and Thailand.

Findings – The study's findings are based on correlation analysis of the Schwartz value set and circular economyrelated issues, including openness to circular economy, switching behavior for sustainable fashion solutions (remanufactured and second-hand products), and a Welch test comparing respondents' answers from Laos and Thailand. Results show that, despite close similarities in culture and values, the openness of Thai and Lao respondents to circular economy is different from each other, and they also prefer different circular solutions in the field of fashion consumption.

Research limitations - the selection of participants and the small number of respondents.

Practical implications – By highlighting similarities and differences between Laos and Thailand, practical implications include the possibility of using this information to choose an appropriate form of fashion products for the Lao market, thereby supporting circular economy-related behavior.

Originality/value – This work is one of the first attempts to discover Lao people's opinion about circular economy supporting behavior related to fashion products.

Keywords: Circular consumption, Cultural values, Laos, Switching, Thailand

1. Introduction

The transition towards a circular economy (CE), a form of sustainable consumption (Kirchherr et al., 2017), has become a growing priority for businesses and policymakers worldwide. The concept of it aims to promote sustainable development by emphasizing the efficient use and recycling of resources, in contrast with the linear "take-make-dispose" model of the traditional economy. To make this concept work, changes need to happen in industries and society. Companies are only one stakeholder in this transition - consumers are on the other side. Still, as Camacho-Otero and colleagues (2018) mentioned, most of the literatures focus on the companies' side and less attention is paid to how consumers are engaged with the idea of circular economy; and five years later, Vidal-Ayuso and colleagues (2023) find that there are still small amount of studies about consumers' role in CE. Additionally, literature considering consumers as important change-makers in CE describes them as rational decision-makers (Kremel, 2024), disregarding that to switch from their current buying habits, it would be fundamental to quit the need to own goods, and own them as new. This should be a major change for consumers in many countries. Despite studies write about many people who consider themselves as environmentally aware persons, these researches primarily measured respondents' attitude and opinion about sustainable consumption, but Bergquist and Warshaw (2019) discussed that having positive attitude to sustainability is not equal with sustainable behavior. Hence, understanding consumers' behavior, openness of consumers to the concept of circular economy, and their willingness to change buying habits play a unique and crucial role in the swift transition towards sustainable consumption. Some countries are under investigation, but researches in middle or low-income Asian countries are underrepresented; additionally, most of the studies describe consumption related to electronic devices, car usage, waste-collection, and packaging (Camacho-Otero et al., 2018).

Although several studies have examined consumer behavior in sustainable practices, most focused on Western or developed economies, where infrastructure and policy environments are highly conducive to the circular economy (CE). In contrast, academic research on implementing CE principles in developing countries in Southeast Asia, such as Laos, is limited. To address this shortage, this study is focus on comparison between Laos and Thailand, a culturally similar and more economically developed neighboring country, provide new perspectives on the influence of culture, values, and income levels, as well as deeper understanding of the social and cultural factors behind circular economy behaviors and offer practical insights into how sustainable product strategies can be tailored to regional contexts that have not been sufficiently studied.

In terms of examining gaps in the study, experimentally investigating the differences between self-perceived and behaviors, particularly in the context of switching habits and engaging with circular fashion alternatives, such as second-hand, sharing practice, and remanufacturing. Moreover, this study provides a different perspective on consumer engagement with CE. Underline factors such as cultural values, social norms, and economic levels to address a comprehensive view of what motivates consumer openness to the circular economy. These contributions provide insight to support policymakers, educators, and businesses in promoting sustainable consumption.

This study measures the values and CE-related attitudes of a seldom-studied country, Laos; investigates how these variables influence openness for and switching intention to CE; and which form of circular economic solution is more acceptable in fashion products. In this article, an attempt is also made to compare Lao respondents' results to Thai responses to discover how Western influence affects values and behavior in Thailand. Using similarities and differences between the two countries and information about how open Lao consumers are, circular offers could be designed better for this market.

The object of this study is to analyze how cultural values, attitudes, and norms influence openness to circular fashion consumption between Laos and Thailand.

The method used to examine this study is based on Descriptive statistics, Pearson's correlation analysis, and Welch's two-sample t-tests.

2. Literature Review

Kirchherr et al. (2017) found consumer acceptance as an important factor behind the spread of the CE concept, meaning that the reason why the transition to circular economy is slow, or does not work at all, is the missing knowledge and interest on the consumer side. To understand why these elements do not appear for consumers, first, studying the decision process is necessary.

2.1 Decision Making in Consumer Behavior

To achieve sustainable consumption and production, it is essential to consider the entire product lifecycle, focusing on consumer behavior from purchase to disposal. However, most of the researches often take a fragmented approach, examining isolated lifecycle stages independently and across different fields. This limits a broader understanding of sustainable consumption, as studies frequently overlook the full context of consumer behavior (Kremel, 2024). It is also suggested to extend the disposal process with CE-related behavior such as "repair", "recycle", and "shared use" (Vidal-Ayuso et al., 2023) and understand what drives consumers to prefer one solution or another.

Jackson (2005) suggested four groups of models as theoretical frameworks to analyze consumption decisions. First group describes consumers' decision as a rational choice; the second one combines the previous models with the expected value of consumption and uses the means-end chain model; in the third group, cultural factors are added as motivation factors of consumption, and the fourth group contains possible practices in the context of society. With the exception of the first group, all of them contain culture, values, and norms as influencing factors of consumers' performance. Individual consumption is planted into the social environment, and this context is defined by culture and norms (Halkier et al., 2017), and culture can be identified as a soft factor supporting or hindering CE shift (Gomes et al., 2024). Some studies (Evans, 2012; Pettersen et al., 2013) found practical examples of how norms influence food waste or laundry habits and suggest that if we want to understand the motives of behavior, we have to step back to the roots - e.g., culture and norms. Based on the theory of planned behavior, attitude is also an element which seems to affect behavior, so it is worth implementing into the research framework as well (Hazen et al., 2017; Pisitsankkhakarn & Vassanadumrongdee, 2020), and recent studies have found the same factors important in switching intention toward CE solutions also (Perez-Castillo &Vera-Martinez, 2021; Musova et al.,2021). Despite the importance of these basic factors, there is still little research on them. It would be even more important, because in addition to 'dispose', consumers became involved in the rest of the purchasing process, and want to participate in 'make', 'distribute', and 'use' stages as well. (Vidal-Ayuso et al., 2023). It is necessary to inform them what their possibilities to do so are and how to shift to a more circular consumption, hence, the role of information and its sources suggested to be acknowledged (Musova et al., 2021).

A carefully chosen information channel can help to convince consumers that the decades-old idea that the new product is a good product now needs to change. The role of information is crucial not only to give knowledge to consumers but also to educate them about the importance of sustainable behavior and their possibilities regarding its form. Studies revealed that consumers' decisions strongly depend on the orientation they receive (Bigerna et al., 2021; Ozanne et al., 2021). Others suggest to share information about ingredients, components of the product and the effect they have for the environment as well (Boesen et al., 2019; Wang et al., 2020), simple because facts about how the product harm or reinforce sustainable consumption may influence the willingness to change consumers' buying decisions and purchase intention (Gomes et al., 2022). Combining results of Chamberlin et al. (2018) and Muranko et al. (2019), social media can be supposed to be a promising channel for both types of communication (knowledge and education), since it can reach most of the target groups and is able to perform emotive and persuasive communication. The idea of examining the role of social media is supported by Weber Macena et al. (2021), who emphasized the importance of young adults in environment-friendly behavior habits.

2.2 Role of Values in Circular Economy

As discussed in the previous sub-chapter, consumers, especially young ones, consider themselves environmentally conscious, but their behavior does not necessarily indicate this. The reason for this inconsistency may be explained by the values as drivers of different attitudes and actions (Mitchell, 2019). Kremel (2024) discussed in her study that the concept of environmental values and consumption values cannot fully explain young adults' behavior, and even the value construct of Sheth et al. (1991) she used was found insufficiently usable.

The environmental values approach is based on a much broader value-based explanation of behavior. Partly for this reason, and partly because Laos and Thailand are far away from the Western cultures studied so far, a more general value model was chosen for this study: the Schwartz Theory of Basic Values (Schwartz, 2012). The concept consists of ten values sorted into four constructions: (1) openness to change with hedonism, stimulation, and self-direction; (2) self-transcendence with universalism, benevolence, and partly conformity and tradition; (3) conservation with security, conformity and tradition; and (4) self-enhancement with power, achievement and partly hedonism. Some elements of this model are assumed to have a supportive or avoidance effect on CE, based on the literature.

Kremel (2024) found usability, reliability, emotional values, excitement, and social value as CE supporting components, which can be paired with the following values of the Schwartz model. Achievement, as success demonstrating the ability to choose an appropriate solution and competence in in social standards can represent usability and social values; security, as stability and harmony both in society and self may serve as reliability; hedonism, as pleasure for ourselves performs emotional values; and stimulation, as novelty and challenge in life may be the excitement. In contrast, Gomes et al. (2024) stated that a person with strong hedonic value and a lifestyle that is dedicated to consumption will not prefer to consume durable goods.

Machado et al. (2019) studied the second-hand fashion market and found some values related to the purchase of this type of product. They claim that a second-hand purchase can serve hedonism, considering its treasure hunting feeling; in addition, social interactions during the purchase process may increase satisfaction and experience. Owning a rarely found item from a second-hand shop may help consumers feel unique and original as well. These characteristics also correspond to Schwartz's values of hedonism, security, and self-direction.

2.3 Circular Behavior in Fashion

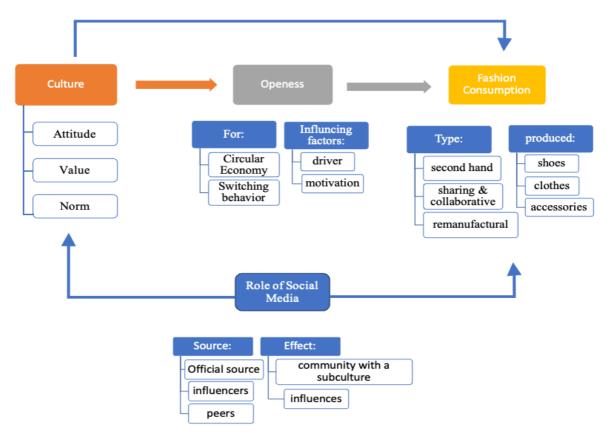
The fashion industry is one of the sectors that most needs to adapt its operations to sustainability - they use many chemical materials and support the fast fashion model, which is against the CE or sustainable consumption concepts (Gomes et al., 2024). Consumers of fashion products also seem to lack knowledge, acceptance, and commitment to the CE model (Hvass & Petersen, 2019; Sing et al., 2019).

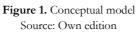
Based on the literature review of Vidal-Ayuso et al. (2023), the following CE solutions can be identified in the field of fashion consumption. One of the possibilities is to extend the lifetime of fashion products by using them for a longer time or repairing them when necessary (Bracquené et al. 2021). Another one may be remanufacturing, when used products or waste materials are used to create something new using creativity and an innovative mindset (Aschemann-Witzel and Stangherlin, 2021). Sharing is also a way to bring our behavior closer to circularity (Barbu et al., 2018); however, its use regarding fashion products can be limited. Last, but not least, as Machado et al. (2019) mention, resale, also known as second-hand purchase, is a billion-dollar business. Despite it seems to be an opportunity to reduce expenses for people from lower social classes, higher-class buyers may follow this way to find limited goods.

Still, without switching intention on the consumers' side, these solutions will remain only possibilities; hence, strategies and communication about the role of switching for environmentally and society-friendly products should be the first step. Perez-Castillo and Vera-Martinez (2021) considered switching behavior as the main influencing factor to change people's minds and found that switching intention toward

remanufactured and second-hand products is supported by attitude regarding these products but independent from their price.

Summarizing the above-mentioned literature background, a conceptual model was created (see Figure 1). Due to the complexity of the model, only some parts of it will be analyzed in this study. The conceptual model underscores the way culture and openness connect with consumption and is more focused on sustainable fashion consumption. These results confirm that there are other critical cultural factors, which are attitudes, values, and norms that are pivotal in the consumption of fashion products. These cultural factors indicate how an individual approaches fashion. The key term of the approach is openness, which refers to a particular individual or their attitudes towards innovation, including sustainable fashion. This openness is connected with the cultural attitudes that define the extent of the motivation of people to adopt new ideas of purchasing fashions that support the circular economy or switching behaviors, such as toward more environmentally friendly fashion options. In terms of driver and motivation, it has the influence of openness to consuming second-hand, shared, or remanufactured fashion. Sustainable Fashion Consumption: Second-Hand, Sharing and Collaborative, Remanufactured.





These practices signal a change from the traditional modes of producing fashion to a more sustainable solution. It has shown how people are open to a circular economy (willing to buy shoes, clothes, and accessories) when it comes into practice. Finally, social media is a source of fashion for consumers and can impact consumer fashion in the fashion industry. Official sources, influencers, and peers actively contribute to the popularizing and formation of subcultures and personal identity representing qualities as shared and consumed content. The proposed model demonstrates how cultural factors affecting purchasing and cultural openness interplay with the shift toward sustainable fashion consumption.

3. Research Questions and Hypotheses

Based on the literature review and the conceptual model, the research question and hypotheses were created:

3.1 Research Questions

RQ1: How do attitudes, cultural values, and norms influence openness to circular economy practices? RQ2: How does openness to circular economy practices influence different types of fashion consumption, such as second-hand, sharing, remanufactured goods?

RQ3: How does consumer income influence to openness to circular economy in fashion consumption?

3.2 Hypothesizes

H1: Positive cultural attitudes towards sustainability positively influence openness to circular economy practices.

H1a: Cultural norms have a positive influence on openness to circular economy practices.

H1b: Cultural values positively influence openness to circular economy practices.

H2: Schwartz's value set has a strong relationship with CE phenomenon, such as openness, switching intention, sharing and purchasing of second-hand or remanufactured products.

H2a: Achievement and self-direction will support this phenomenon.

H2b: Hedonism and tradition will not support this phenomenon.

H3: Openness to circular economy influences the consumption of circular economy practice.

H3a: Openness to circular economy practices positively influences the consumption of second-hand fashion products.

H3b: Openness to circular economy practices positively influences participation in sharing in fashion consumption.

H3c: Openness to circular economy practices positively influences the consumption of remanufactured fashion products.

H3d: Consumption of second-hand fashion products will accepted the highest level.

H4: Higher-income levels are positively relationship with openness to circular economy in fashion consumption.

During the research, constructions based on literature were used.

Attitude towards the circular economy is a comprehensive construct that reflects the cognitive, affective, and behavioral dimensions of individuals' evaluations and predispositions towards sustainable practices, measured on an 8-item, 8-point Likert scale developed by Perez-Castillo and Vera-Martinez (2021).

Value in the context of cultural values refers to 10 items of Schwartz's value. Accessed with an 8-point Likert scale, these values influence decision-making and behaviors, contributing to the successful implementation of cultural values in the circular economy. (Lindeman and Verkasalo, 2005)

Value in the context of the circular economy refers to the ethical, social, and environmental principles that guide organizations and individuals towards sustainable practices. Accessed with an 8-item, 8-point Likert scale, these values influence decision-making and behaviors, contributing to the successful implementation of circular economy initiatives and improving overall financial performance (Kwarteng et al., 2022).

Norms are the shared expectations and rules within a society or community that guide individuals' behaviors and decisions. In the context of the circular economy, using a 4-item, 8-point Likert scale to measure norms influence consumer behaviors towards sustainable practices, such as purchasing circular apparel, and can vary significantly across different cultural contexts by Gomes et al. (2022).

Openness to the circular economy is the extent to which individuals are willing and positively inclined to adopt and support circular economy principles and practices. A 15-item, 8-point Likert scaled was applied to evaluate this openness. It reflects a proactive approach to sustainable consumption, particularly in the fashion industry, and is influenced by the understanding and valuing of the environmental and social benefits of these practices, as noted by Carvalho et al. (2020).

In the context of sustainable consumption and the circular economy, switching behavior refers to the extent to which customers are willing and able to switch from their usual product consumption to remanufactured or more sustainable products. This behavior is highly determined by their green buying behavior and the positive attitude towards remanufactured products signaling, which is scaled by an 8-item scale, indicating that, other than 'rational economic self-interests', there are internal non-market incentives (as cited in Perez-Castillo and Vera-Martinez, 2021).

Remanufactured products are previously used items that have been restored to a like-new condition through a detailed and environmentally friendly process. They are central to the circular economy by promoting resource efficiency and sustainability. Consumer acceptance of remanufactured products on perceived quality, environmental benefits, and the influence of green behaviors (Perez-Castillo & Vera-Martinez, 2021). An 8-item scale was developed and applied in the questionnaire.

Second-hand products refer to products that have been owned by a prior user, sold as used merchandise, and sent again together with their reusable packaging/goods for new consumers' use. The second-hand market is important because consumer engagement, economics and ethics, social interactions as well as motivations of the different stakeholders are involved in its consolidation (Machado et al., 2019).

Sharing and collaborative consumption in the circular economy involve accessing goods and services without ownership. This modern adaptation of age-old practices is gaining popularity and challenging traditional business models, reflecting a shift in cultural attitudes toward consumption and ownership (Belk, 2014).

Social media plays a crucial role in the circular economy by enhancing consumer engagement and promoting sustainable practices. Machado et al. (2019) identify its importance in thrift shopping, noting how social media facilitates consumer participation and the organization of clothing exchange events, which highlights the economic and critical dimensions of second-hand goods. Camacho-Otero et al. (2018) emphasize that social media is key to bridging gaps in consumer education and awareness regarding circular consumption. Vidal-Ayuso et al. (2023) further suggest that social media addresses gaps in existing consumer behavior studies by providing platforms for post-purchase interactions and feedback, thus supporting the progression of circular economy practices. The assessment involved a 20-item, 8-point Likert scale in the questionnaire.

4. Methodology

Data analysis began with assessing the reliability of all variables using Cronbach's alpha. This test was used to assess the internal consistency of the items within each construct to ensure the scale's reliability (Cronbach, 1951). Cronbach's alpha values greater than 0.7 will be regarded as acceptable for further study (Peterson, 1994). Additionally, Pearson's correlation analysis was employed to examine the relationships between variables. Pearson's correlation coefficient assists us in comprehending the degree of linear connection between key constructs by determining the strength and direction of their associations (Cohen, 1992). Furthermore, the results of Thailand and Laos are compared using Welch's two-sample t-test. This statistical test was chosen because it does not assume identical variances across the two groups and is more robust when variances diverge, making it particularly suitable for our sample (West, 2021). This strategy, was used to detect any major differences in cultural and consumer behavior patterns connected to circular economy activities between these two countries.

4.1 Data Collection

The primary data used in this study was obtained in July 2024 via the Google survey platform. The completion was anonymous, with an approximate time of 5-8 minutes. The majority of the study's participants consisted primarily of Laotians and Thais. The respondents were reached through groups on online social networking sites (Lao-Thai trading communities). The questionnaire is designed to focus on and measure various cultural values and how they relate to the adoption of circular economy principles. The participants were instructed to rate their level of agreement using an 8-point Likert scale, where 1 represented "definitely disagree" and 8 represented "definitely agree" (Lindeman & Verkasalo, 2005).

4.2 Sample Characteristics

A total of 62 people filled in the survey, including 16 respondents from Thailand and 46 respondents from Laos. In the analysis, only respondents who provided a complete response had a standard deviation at least 1 (each of question was measured on a Likert scale), and the completion time of the questionnaire of 5-8 minutes was included in the sample. The demographic characteristics of the sample were typically male 47.62% (30 respondents and female 46.03% (29 respondents). A small sample of respondents preferred not to say their gender 4.76% (3 respondents). Age was measured in the survey, which was transformed into four equal nearly interval categories. In terms of that the age between 18 and 25 with 46.03% of 29 respondents, while in the age 26 to 45 with 47.62% of 30 respondents. Moreover, with a smaller percentage of the aged 46 to 66 with 3.17% of 2 respondents, only 1.59% of 1 respondent was 67 or older. Additionally, in terms of the education of the respondents, Bachelor's degrees has the highest with 57.14% of 36 respondents, Master's degrees with 31.75% of 20 respondents, while completed postgraduate of doctoral studies with 6.35% of 4 respondents and only 3.17% with 2 respondents of secondary education. The demographic profile of the sample is representative of the result in term of gender, age, and education background.

Result 5.

Table 1. highlights Pearson's correlation study findings for culture and key consumer behavior variables in Laos and Thailand. The test assesses the degree and relevance of the connection between cultural values and variables such as openness, switching behavior, second-hand shopping, remanufacturing, and sharing.

Country	Variables	p-value	95%	Correlation (r)	Interpretation
			Confidence		
			Interval		
Laos	Culture and Openness	0.0318	[0.0315,	0.3359	Moderate positive correlation;
			0.5833]		statistically significant.
Thailand	Culture and Openness	0.0681	[-0.0372,	0.4671	Moderate positive correlation; not
			0.7818]		statistically significant.
Laos	Culture and Switching	0.0011	[0.2168,	0.4916	Moderate positive correlation; highly
			0.6943]		significant.
Thailand	Culture and Switching	0.5194	[-0.6165,	-0.1739	Weak negative correlation; not
			0.3521]		statistically significant.
Laos	Culture and Second-	0.0001	[0.3037,	0.5591	Strong positive correlation; highly
	hand		0.7395]		significant.
Thailand	Culture and Second-	0.2491	[-0.2237,	0.3060	Weak positive correlation; not
	hand		0.6961]		statistically significant.
Laos	Culture and	< 0.0001	[0.4050,	0.6337	Strong positive correlation; very
	Remanufacturing		0.7878]		highly significant.
Thailand	Culture and	0.994	[-0.4942,	0.0020	No correlation; not statistically
	Remanufacturing		0.4972]		significant.

Table 1 Correlation between Culture and Fashion Consumption Laos-Thailand

Laos	Culture and Sharing	0.0007	[0.2379, 0.7057]	0.5084	Moderate positive correlation; highly significant.
Thailand	Culture and Sharing	0.0120	[0.1645, 0.8492]	0.6104	Strong positive correlation; statistically significant.

Source: Own edition

Cultural values and a range of fashion consumption in Laos are significantly positively correlated, according to Pearson's correlation analysis. Following Table 1, there is a Strong positive relationship (r = 0.6337, p < 0.6337, p <0.0001) between culture and remanufacturing, supporting H3c, which indicates that fashion consumption has a stronger culture value in remanufactured products. Additionally, this implies that people who respect traditional or regional cultural values may be more receptive to recycling and sustainability initiatives. Besides that, also a moderate positive correlation (r = 0.3359, p = 0.0318) between culture and openness, supported H1b. These findings suggest that in Laos, remanufactured products are preferred more strongly by those with higher cultural values. Comparable cultures are shown in sharing (r = 0.5084, p = 0.0007) supported H3b; switching behavior (r = 0.4916, p = 0.0011); and second-hand buying (r = 0.5591, p = 0.0011); 0.0001), supported H3a, and rejected H3d, based on the circular economy practices, remanufacturing is the highest not second-hand. Overall, the idea of cultural value has significant when it comes to fashion consumption practices in Laos, supported H3. However, in Thailand, there are different relationships. There is a substantial positive association (r = 0.6104, p = 0.0120) between sharing and culture, supported H3b, while H3, H3a, H3c, and H3d are not supported as highlighted in Table 1, but there are moderate to weak correlations (although not statistically significant) with other characteristics like openness and secondhand shopping. Remarkably, there is no association (r = 0.0020, p = 0.994) between culture and remanufacturing.

Moreover, cultural values seem to have a greater impact on fashion consumption in Laos more than in Thailand, especially when it comes to decisions on remanufacturing and second-hand, but other variables most of them are a moderate positive correlation.

	Table 2 (Jorrelation Norm	and Attitude between T	hailand – Laos		
Variable	Openness	Switching	Second-hand	Remanufacturing	Sharing	
Laos Norm	0.61**	0.36*	0.43**	0.36*	0.68***	
Thailand Norm	0.41	0.23	0.40	0.21	0.44	
Laos Attitude	0.65***	0.74***	0.88***	0.88***	0.73***	
Thailand Attitude	0.43	0.35	0.66**	0.61*	0.57*	
Source: Own edition						

Table 2 Correlation Norm and Attitude between Thailand - Laos

Note:

*p < 0.05 **p < 0.01 ***p < 0.001

The correlation between norms and attitudes with openness, switching, second-hand, remanufacturing, and sharing behaviors varied between the Lao and Thai samples (see Table 2.). In Laos, social norms had a moderate connection with openness (r = 0.61, p < 0.01), supported H1a; second-hand purchasing (r = 0.43, p < 0.01); remanufacturing (r = 0.36, p < 0.05); and sharing behaviors (r = 0.68, p < 0.001). This implies that higher level cultural norms in Laos have a beneficial impact on consumer behavior toward sustainable practices, with the biggest effect on sharing behaviors. On the other hand, the relationships between norms and these behaviors are lower and largely non-significant in Thailand, with the exception of sharing (r = 0.44) and openness (r = 0.41), both of which approached significance.

In addition, Laos has substantial positive relationships with attitudes toward all actions, especially when it comes to remanufacturing (r = 0.88, p < 0.001), second-hand (r = 0.88, p < 0.001), and openness (r = 0.65, p < 0.01), supported H1. This suggests that engagement in these sustainable actions is highly predicted by more positive toward them. Significant correlations have been found between second-hand purchasing (r = 0.66, p < 0.01) and remanufacturing (r = 0.61, p < 0.05) in Thailand, indicating that attitudes play a role

as well, though a smaller one than in Laos. The findings emphasize the relevance of both cultural norms and attitudes in shaping sustainable consumer behavior, with higher effects in Laos than in Thailand. **Table 3** Correlation result for dimension across Laos and Thailand

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Dimension	Country	Openness	Switching	Second-hand	Remanufacturing	Sharing
Self-Direction	Laos	0.23	0.34*	0.41**	0.49***	0.44**
	Thailand	0.12	-0.24	0.14	0.14	0.31
Achievement	Laos	0.25	0.37*	0.36*	0.55***	0.46**
	Thailand	0.23	-0.02	0.3	0.07	0.38
Hedonism	Laos	0.31*	0.38*	0.47**	0.51***	0.44**
	Thailand	0.35	-0.09	0.17	0.12	0.52*
Tradition	Laos	0.18	0.38*	0.44**	0.52***	0.42**
	Thailand	0.58	-0.35	-0.23	-0.14	0.49*

Source: Own edition

Note:

*p < 0.05 **p < 0.01

***p < 0.001

The findings show in Table 3. that there are various differing degrees of relationship between the fashion consumption of two countries (Thailand and Laos), and the four value dimensions across those behaviors. These findings supported H2. Remanufacturing ($\mathbf{r} = 0.49$, $\mathbf{p} = 0.001$) and sharing ($\mathbf{r} = 0.44$, $\mathbf{p} = 0.007$) are two aspects of fashion consumption in Laos where the self-direction dimension exhibits strong positive relationships, supporting H2a. However, in Thailand, none of these relationships were statistically significant. In Laos, achievement has a substantial positive connection with remanufacturing ($\mathbf{r} = 0.558$, $\mathbf{p} < 0.001$), supporting H2a, whereas in Thailand, relationships are generally weaker and usually non-significant. Hedonism is also significantly associated with activities in Laos, especially second-hand purchase activities ($\mathbf{r} = 0.477$, $\mathbf{p} = 0.002$). In Thailand, only sharing behavior showed a significant relationship ($\mathbf{r} = 0.524$, $\mathbf{p} = 0.037$) among those behaviors. Furthermore, Tradition in Laos has a substantial correlation with numerous activities such as remanufacturing ($\mathbf{r} = 0.528$, $\mathbf{p} < 0.001$) and second-hand purchasing ($\mathbf{r} = 0.444$, $\mathbf{p} = 0.004$). In Thailand, tradition is strongly associated with openness ($\mathbf{r} = 0.587$, $\mathbf{p} = 0.017$) and sharing ($\mathbf{r} = 0.499$, $\mathbf{p} = 0.049$) as Shown in H2b. H2b was that contradict and reject it. However, H2b is not supported, as the findings contradict and reject H2b. The result suggests a noticeable cross-country difference in how the four value dimensions influence consumer behaviors.

Variable	t-value	df	p-value	Mean (Thailand)	Mean (Laos)	95% Confidence Interval
Culture	0.099	31.834	0.922	5.84	5.80	(-0.76, 0.84)
Norm	0.011	22.958	0.991	5.41	5.40	(-0.71, 0.72)
Attitude	-0.107	31.684	0.916	5.73	5.78	(-0.86, 0.78)
Openness	0.596	29.143	0.556	6.21	6.03	(-0.44, 0.80)
Switching	0.126	28.169	0.901	5.12	5.05	(-0.99, 1.13)
Second-hand	-0.147	29.839	0.884	5.31	5.38	(-0.97, 0.84)
Remanufacture	0.190	28.863	0.851	5.54	5.45	(-0.86, 1.04)
Sharing	0.643	33.945	0.524	6.27	6.11	(-0.35, 0.68)
Income	3.392	46.714	0.001	4.06	3.09	(0.39,1.53)

Table 4 Welch Two-Sample T-test Result Thailand-Laos

Source: Own edition

A series of Welch two-sample t-tests were used to compare the means of significant cultural and behavioral factors in Thailand and Laos (see Table 4.). The results show no statistically significant differences between

the two countries in any of the investigated variables, with all p-values exceeding the standard level of 0.05. In terms of cultural values, Thailand's value equal 5.84 whereas Laos' value was 5.80 (t-value = 0.099, pvalue = 0.922), indicating that the differences were insignificant. The confidence range for these cultural disparities between Thailand and Laos was between -0.76 and 0.84. Social norms also showed nearly no differences between the two groups (mean for Thailand = 5.41 and mean for Laos = 5.40 together with pvalue = 0.991, t-value = 0.011). Attitudes toward sustainable practices were also not significantly different, with means of 5.73 and 5.78 for Thailand and Laos, respectively (t-value = -0.107, p-value = 0.916). Similarly, characteristics connected to openness, switching behavior, second-hand purchasing, remanufacturing, and sharing behaviors showed no significant differences (p-values ranged from 0.524 to (0.901). Nevertheless, sharing behaviors received the highest average score in both Thailand (mean = 6.27) and Laos (mean = 6.11) compared to other fashion consumption, with a 95% confidence interval between -0.35 and 0.68. The results indicate that there are striking similarities between Thailand's and Laos' cultural norms, beliefs, and attitudes about sustainable fashion consumption. This may point to common cultural influences from the region or comparable views in society regarding sustainability, even in the face of possible variations in other economic or social elements. Additionally, when it comes to the income between Laos and Thailand. The result has shown a difference of significance, with a t-value of 3.392 and 46.714 degrees of freedom. The p-value equals 0.01, indicating that the difference in income between Laos and Thailand is statistically significant. Besides, the mean income of Thailand is 4.06, while Laos is 3.09, which indicates the income level of Thailand is significantly higher, supported H4.

6. Discussion

In several cases of the hypotheses mentioned in the study, their correctness can be supported, but in some cases, the assumed connection does not exist. In addition, it is clear from the analysis that the two countries investigated differ significantly in their relationship to the subject under exploration.

According to results in Table 3. it can be said that both norms and attitudes have a positive, significant relationships with the openness for CE and switching behavior in Laos, but the extent of the same relationships is much lower and not significant in Thailand. Norms also support sharing, consumption of second-hand and remanufactured goods in Laos, but both countries' respondents show a strong and significant connection between these forms of consumption and attitudes. Based on Table 1, cultural values in general also show a significant, medium-level relationship to openness and switching intention in Laos. These results were supported by the models of Jackson (2005), and theories of Halkier (2017) and Gomes et al. (2024). Despite the significant and strong relationship between attitude and consumption of CE solutions (sharing, remanufacturing, and second-hand goods) in Thailand, there is no connection with openness, switching behavior, and also a connection between cultural values and CE-related behavior is missing. It may be explained by Bergquist and Warshaw's assertion (2019) that attitude does not equal action, especially not in a country (Thailand) where, as a result of Westernization, it is expected to have at least a strong attitude toward (more) sustainable consumption.

Examining the cultural values separately, it can be found that only hedonism has a significant relationship with openness in Laos, but each of the values in Table 2 shows a significant connection to switching behavior. Each value in Laos has the strongest – but only a medium level - correlation with remanufacturing, while Thailand shows significant correlation only between hedonism, traditional values, and sharing. Thailand's result may appear because sharing does not mean a big change in consumers' buying habits. They still can buy new products, and after a certain level of use they can forward it to others. According to Gomes et al. (2024), a hedonic lifestyle is not about long-term use. This discrepancy may stem from Thailand's relatively higher Western influence, which potentially shifts focus toward modern consumption behaviors over traditional practices.

In the case of Laos, remanufacturing can cause a feeling of self-direction and achievement, and through creativity and innovativeness, hedonism as well. While both country historically have the tradition value, that contain a strong social connection, the medium level correlation to sharing is not a surprise. However, the consistent character of correlation toward remanufacturing in Laos raises another question: may the reason behind remanufacturing be the set of these values or something else?

Income levels between the two countries exhibit significant differences, with Thailand having a higher mean income than Laos. Despite these economic disparities, no statistically significant differences in attitudes, norms, or cultural values related to CE practices were observed. This suggests that while economic factors may shape access and affordability, cultural and social dimensions play a more significant role in determining openness to CE practices. That fits the phenomena of Machado (2019) about the income-independent characteristics of CE consumption but may explain the highest level of correlation to remanufactured goods in Laos: probably it is not a choice but a necessity for Lao people due to the lower level of income.

7. Conclusion

This study provides an examination of how cultural values, attitudes, norms, and income shape openness to the circular economy and its basic solutions in fashion products in Laos and Thailand, and attempts to offer a brief comparison between the two countries. The findings of this study have important implications for both policymakers and businesses looking to promote circular economy practices. The role of cultural values, attitudes, and social norms in shaping consumer behavior highlights the need for culturally tailored interventions. In Laos, emphasizing the cultural value of sustainability and aligning circular economy practices with traditional norms may be an effective strategy. For example, marketing campaigns that frame second-hand and remanufactured goods as part of a long-standing cultural practice of reusing and recycling could resonate with consumers. In Thailand, on the other hand, where cultural norms around sustainable fashion practices appear weaker, more targeted educational campaigns that focus on the environmental and economic benefits of CE could help increase openness. Social media, as a persuasive communication channel, could be leveraged to reach young consumers and educate them about the environmental impact of fast fashion and the benefits of sustainable alternatives.

The study has some limitations. The number of respondents must be raised, especially in Thailand, to ensure the findings and questions resulting from the findings are clarified. While cultural values in general resulted in a correlation with openness and switching, analyzing the values separately gave different results. One direction for further research may be the analysis of the effect of other cultural values. In Laos, it is still questionable what the real reason is behind supporting the consumption of remanufactured goods: income level and necessity, or a real sustainable way of thinking.

Still, the study's findings offer actionable insights for promoting CE in fashion:

- Tailored Communication Strategies: Effective communication channels, including social media, can play an important role in influencing attitudes and norms. Tailored messaging that resonates with cultural values, especially in Laos, can enhance the adoption of sustainable practices.

- Focus on Accessibility and Affordability: Given the income disparities, affordable CE solutions should be prioritized in Laos. Subsidizing remanufactured goods or promoting second-hand markets could increase accessibility.

- Leveraging Shared Practices: Sharing behaviors emerged as the most accepted CE practice, suggesting a strong potential for collaborative consumption models, such as clothing rental or exchange platforms.

- Education and Awareness Campaigns: Strengthening attitudes and norms through targeted educational campaigns can bridge the gap between positive perceptions and actual behaviors, particularly in Thailand, where cultural values showed weaker correlations with sustainable actions.

Acknowledgement

This publication and research has been supported by the National Research, Development and Innovation Office through the project nr. 2019-1.3.1-KK-2019-00015, titled "Establishment of a circular economy-based sustainability competence center at the University of Pannonia"

Conflict of Interest

The authors report there are no competing interests to declare.

References

Aschemann-Witzel, J. & Stangherlin, I.D.C. (2021). Upcycled by-product use in agri-food systems from a consumer perspective: a review of what we know, and what is missing. *Technologycal Forecasting and Social Change*, 168, 120749. <u>https://doi.org/10.1016/j.techfore.2021.120749</u>.

Barbu C. M., Florea D., Ocarca R.F., & Barbu M. (2018). From ownership to access: how the sharing economy is changing the consumer behavior. *Amfiteatru Economic* 20(48):373–387. https://doi.org/10.24818/EA/2018/48/373

Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67, 1595–1600. <u>https://doi.org/10.1016/j.jbusres.2013.10.001</u>

Bergquist P., & Warshaw C. (2019). Does global warming increase public concern about climate change?. *The Journal of Politics, 81*(2), 686–691. <u>https://doi.org/10.1086/701766</u>

Bigerna, S., Micheli, S., and Polinori, P., (2021). New generation acceptability towards durability and repairability of products: circular economy in the era of the 4th industrial revolution. *Technological Forecasting and Social Change*, 165, 120558. <u>https://doi.org/10.1016/j.techfore.2020.120558</u>

Boesen, S., Bey, N., and Niero, M. (2019). Environmental sustainability of liquid food packaging: is there a gap between Danish consumers' perception and learnings from life cycle assessment?. *Journal of Cleaner Production*, 210, 1193–1206. <u>https://doi.org/10.1016/j.jclepro.2018.11.055</u>

Bracquené, E., Peeters, J., Alfieri, F., Sanfélix, J., Duflou, J., Dewulf, W., and Cordella, M., (2021). Analysis of evaluation systems for product repairability: a case study for washing machines. *Journal of Cleaner Production*, 281. <u>https://doi.org/10.1016/j.jclepro.2020.125122</u>.

Calvo-Porral, C., & Lévy-Mangin, J.-P. (2020). The Circular Economy Business Model: Examining Consumers' Acceptance of Recycled Goods. *Administrative Sciences*, 10(2), 28. https://doi.org/10.3390/admsci10020028

Camacho-Otero, J., Boks, C., and Pettersen, I. N. (2018). Consumption in the circular economy: A literature review. *Sustainability*, 10(8), 2758. <u>https://doi.org/10.3390/su10082758</u>

Carvalho, L. C., Moreira, S. B., Dias, R., Rodrigues, S., & Costa, B. (2020). Circular Economy Principles and Their Influence on Attitudes to Consume Green Products in the Fashion Industry: A Study About Perceptions of Portuguese Students. In S. Rodrigues, P. Almeida, & N. Almeida (Eds.), *Mapping, Managing, and Crafting Sustainable Business Strategies for the Circular Economy* (pp. 248-275). IGI Global. https://doi.org/10.4018/978-1-5225-9885-5.ch012

Chamberlin L., & Boks C. (2018). Marketing approaches for a circular economy: using design frameworks to interpret online communication. *Sustainability*, 10(06), 2070. <u>https://doi.org/10.3390/su10062070</u>

Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159. <u>https://doi.org/10.1037/0033-2909.112.1.155</u>

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334. https://doi.org/10.1007/BF02310555

Evans, D. (2012). Beyond the Throwaway Society: Ordinary Domestic Practice and a Sociological Approach to Household Food Waste. *Sociology*, 46, 41–56. <u>https://doi.org/10.1177/0038038511416150</u>

Gomes G. M, Moreira N, & Ometto A. R. (2022). Role of consumer mindsets, behaviour, and influencing factors in circular consumption systems: a systematic review. *Sustainable Production and Consumption*, 32, 1–14. <u>https://doi.org/10.1016/j.spc.2022.04.005</u>

Gomes, G. M., Moreira, N. & Ometto, A. R. (2024). Consumer Engagement in Circular Consumption Systems: a Roadmap Structure for Apparel Retail Companies. *Circular Economy and Sustainability*, 4(2), 1405-1425. <u>https://doi.org/10.1007/s43615-023-00332-8</u>

Halkier, B., Keller, M., Truninger, M. and Wilska, T.A. (2017). Consumption research revisited: Charting of the territory and introducing the handbook. *In Routledge Handbook on Consumption*. Routledge: Abingdon-on-Thames, UK pp. 1–9.

Hazen, B.T., Mollenkopf, D.A. & Wang, Y. (2017). Remanufacturing for the Circular Economy: An Examination of Consumer Switching Behavior. *Business Strategy and the Environment*, 26(4), 451–464. https://doi.org/10.1002/bse.1929

Hvass K.K. & Petersen E.R.G. (2019). Toward circular economy of fashion. Experiences from a brand's product take-back initiative. *Journal of Fashion Marketing Management*, 23(3), 345–365. https://doi.org/10.1108/JFMM-04-2018-0059

Jackson, T. (2005). Motivating Sustainable Consumption: A Report to the Sustainable Development Research Network. Centre for Environmental Strategy, University of Surrey: Guildford, UK

Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions". *Resources, conservation and recycling*, 127, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005

Kremel, A. (2024). Consumer Behaviour in a Circular System–How Values Promote and Hinder the Participation of Young Adults in the Swedish Deposit-Refund System for Beverage Packaging. *Circular Economy and Sustainability*, 4(2), 1427-1446. <u>https://doi.org/10.1007/s43615-023-00333-7</u>

Kwarteng, A., Simpson, S. N. Y., Agyenim-Boateng, C. (2022). The effects of circular economy initiative implementation on business performance: The moderating role of organizational culture. *Social Responsibility Journal*, 18(7), 1311–1341. <u>https://doi.org/10.1108/SRJ-01-2021-0045</u>

Lindeman, M., and Verkasalo, M. (2005). Measuring Values With the Short Schwartz's Value Survey. *Journal of Personality Assessment*, 85(2), 170–178. <u>https://doi.org/10.1207/s15327752jpa8502_09</u>

Machado, M. A. D., Almeida, S. O. D., Bollick, L. C., & Bragagnolo, G. (2019). Second-hand fashion market: Consumer role in circular economy. *Journal of Fashion Marketing and Management: An International Journal*, 23(3), 382–395. https://doi.org/10.1108/JFMM-07-2018-0099

Mitchell B. (2019). Generation Z and Consumer Trends In Environmental Packaging, pp 1–39. available at <u>https://eprints.leedsbeckett.ac.uk/id/eprint/6066/</u> accessed 18 July, 2024

Muranko Z., Andrews D., Chaer I. & Newton E. J. (2019). Circular economy and behaviour change: using persuasive communication to encourage pro-circular behaviours towards the purchase of remanufactured refrigeration equipment. *Journal of Cleaner Production*, 222, 499–510. <u>https://doi.org/10.1016/j.jclepro.2019.02.219</u>

Musova, Z., Musa, H. and Matiova, V., (2021). Environmentally responsible behaviour of consumers: evidence from Slovakia. *Economics and Sociology*, 14(1), 178–198. <u>https://doi.org/10.14254/2071-789X.2021/14-1/12</u>

Ozanne, L.K., Stornelli, J., Luchs, M.G., Mick, D.G., Bayuk, J., Birau, M., Chugani, S., Fransen, M.L., Herziger, A., Komarova, Y., Kaur, T. and Zuniga, M., (2021). Enabling and cultivating wiser consumption: the roles of marketing and public policy. *Journal of Public Policy and Marketing*, 40(2), 226–244. https://doi.org/10.1177/0743915620975407

Perez-Castillo, D. and Vera-Martinez, J., (2021). Green behaviour and switching intention towards remanufactured products in sustainable consumers as potential earlier adopters. *Asia Pacific Journal of Marketing and Logistics* <u>https://doi.org/10.1108/APJML-10-2019-0611</u>

Peterson, R. A. (1994). A Meta-Analysis of Cronbach's Coefficient Alpha. *Journal of Consumer Research*, 21(2), 381. <u>https://doi.org/10.1086/209405</u>

Pettersen, I.N., Boks, C., and Tukker, A. (2013). Framing the role of design in transformation of consumption practices: Beyond the designer-product-user triad. *International Journal of Technology Management*, 63(1-2), 70-103. <u>https://doi.org/10.1504/IJTM.2013.055580</u>

Pisitsankkhakarn, R. and Vassanadumrongdee, S., (2020). Enhancing purchase intention in circular economy: an empirical evidence of remanufactured automotive product in Thailand. *Resources, Conservation and Recycling*, 156, 104702 <u>https://doi.org/10.1016/j.resconrec.2020.104702</u>

Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. Online readings in Psychology and Culture, 2(1), 11. https://doi.org/10.9707/2307-0919.1116

Sheth J. N., Newman B.I. & Gross B.L. (1991). Why we buy what we buy: a theory of consumption values. *Journal of Business Research*, 22(2), 159–170. <u>https://doi.org/10.1016/0148-2963(91)90050-8</u>

Singh J., Sung K., Cooper T., West K. & Mont O. (2019). Challenges and opportunities for scaling up upcycling businesses – the case of textile and wood upcycling businesses in the UK. *Resources, Conservation and Recycling*, 150, 104439. <u>https://doi.org/10.1016/j.resconrec.2019.104439</u>

Vidal-Ayuso, F., Akhmedova, A., & Jaca, C. (2023). The circular economy and consumer behaviour: Literature review and research directions. *Journal of Cleaner Production*, 137824. https://doi.org/10.1016/j.jclepro.2023.137824

Wang, Y., Zhu, Q., Krikke, H. and Hazen, B., (2020). How product and process knowledge enable consumer switching to remanufactured laptop computers in circular economy. *Technological Forecasting and Social Change*, 161, 120275. <u>https://doi.org/10.1016/j.techfore.2020.120275</u>.

Weber Macena M., Carvalho R., Cruz-Lopes L. P. & Guiné R. P. (2021). Plastic food packaging: perceptions and attitudes of Portuguese consumers about environmental impact and recycling. *Sustainability*, 13(17), 9953. <u>https://doi.org/10.3390/su13179953</u>

West, R. M. (2021). Best practice in statistics: Use the Welch t -test when testing the difference between two groups. *Annals of Clinical Biochemistry: International Journal of Laboratory Medicine*, 58(4), 267–269. https://doi.org/10.1177/0004563221992088



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