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A SYSTEMATIC REVIEW OF SUSTAINABLE SPORTWEAR CONSUMPTION IN INDONESIA : TREND AND FUTURE DIRECTION

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Keywords

ABSTRACT

sustainable sportswear, Indonesia, consumer behavior, sustainable fashion, environmental awareness

In recent years, sustainability has become an increasingly prominent focus in the global sportswear industry, driven by growing environmental awareness and consumer preferences. However, little research has specifically addressed the trends and drivers of sustainable sportswear consumption in Indonesia, a country marked by its unique cultural, economic, and environmental landscape. This systematic review aims to synthesize current knowledge on sustainable sportswear consumption trends in Indonesia, examining factors influencing consumer behavior, key challenges, and opportunities for future development in this sector. The researchers conducted a comprehensive literature review using primary databases (e.g., Scopus, Web of Science) to identify studies that explore the environmental, social, and economic dimensions of sustainable sportswear in Indonesia. Our analysis reveals that Indonesian consumers are gradually shifting toward eco-friendly products. yet barriers such as limited awareness, higher costs, and low market penetration of sustainable brands persist. Additionally, Indonesian culture and socio-economic diversity present unique challenges and opportunities for promoting sustainable sportswear, especially among young consumers and urban populations. The review identifies a clear trend toward environmentally-conscious consumption patterns, albeit at a slower pace compared to Western countries. Future research should focus on developing targeted marketing strategies that resonate with local values, affordability, and awareness campaigns that emphasize the benefits of sustainable consumption. The findings of this review highlight the potential for Indonesia to grow as a sustainable sportswear market, provided that efforts are made to align industry practices with consumer expectations and environmental priorities.

INTRODUCTION

The rapid growth of the global sportswear industry has sparked significant environmental and social concerns, particularly related to the life cycle of apparel—from production and distribution to use and disposal. The fashion industry, including sportswear, contributes substantially to global carbon emissions, water pollution, and waste generation, leading many stakeholders to prioritize sustainable practices (Niinimäki et al., 2020). In response to these challenges, the concept of sustainable fashion, defined as apparel that minimizes its environmental footprint and enhances social responsibility, has emerged as a critical trend within the industry (Henninger, Alevizou, & Oates, 2016).



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Indonesia, a country of more than 270 million people, represents a burgeoning market for sportswear, driven by rising incomes, increasing health consciousness, and a growing younger population actively engaged in sports and fitness activities (Bain & Company, 2021). As consumer awareness of environmental and social issues grows, there is a parallel interest in sustainable products, including eco-friendly sportswear. However, unlike Western markets where sustainability is an established value proposition, sustainable sportswear in Indonesia faces unique challenges, including limited market access, varying levels of consumer awareness, and relatively high costs associated with sustainable materials (Mahbubah, 2015).

Research on sustainable sportswear consumption in Indonesia is still nascent, with only a few studies examining the attitudes, behaviors, and willingness to pay for eco-friendly products (Abbate et al., 2023). These studies suggest that Indonesian consumers generally hold favorable views toward sustainable products but may face constraints related to affordability and accessibility. Additionally, cultural factors play an influential role; for instance, collectivist values prevalent in Indonesian society may affect individual purchasing decisions, as family and community influence can impact the adoption of sustainable lifestyles (Pithaloka et al., 2024).

This article aims to provide a systematic review of existing research on sustainable sportswear consumption in Indonesia, focusing on the prevailing trends, drivers, and barriers in this sector. By analyzing the factors influencing Indonesian consumers' sustainable purchasing behavior, this review seeks to offer insights into the future direction of sustainable sportswear within the country. The researchers examine how consumer awareness, socio-economic status, cultural attitudes, and marketing strategies intersect to shape demand for sustainable products, contributing to the broader discourse on sustainable consumption in emerging economies. Ultimately, this research highlights the potential for sustainable sportswear to grow in Indonesia, provided that industry stakeholders address the challenges and leverage the opportunities presented by this unique market.

METHODS

This study employs a qualitative method utilizing a Systematic Literature Review (SLR) approach. The SLR enables a structured synthesis of existing literature to address specific research questions while minimizing bias through a transparent and replicable process for identifying, evaluating, and interpreting relevant studies. This method is particularly effective for identifying research gaps, consolidating evidence, and providing a framework for further investigation. The SLR also helps map areas of uncertainty and highlights topics requiring additional research. Conducting an SLR involves identifying leading journals in the relevant field, deriving key terms and their synonyms, and systematically using these keywords to locate pertinent studies. For this research, the researchers conducted a comprehensive literature review using primary databases such as Scopus and Web of Science to identify studies that explore the environmental, social, and economic dimensions of sustainable sportswear in Indonesia.

RESULTS

Sustainability in Fashion and Sportswear

Sustainability in the fashion industry, including sportswear, is increasingly a global concern due to its significant impact on the environment. Research shows that this sector contributes significantly to pollution, waste, and resource depletion (Niinimäki et al., 2020). Sportswear presents a unique sustainability challenge due to its reliance on synthetic materials, high performance requirements, and rapid changeover cycles (Wang & Shen, 2017). Research shows that textile production is one of the main contributors to greenhouse gas emissions, water consumption, and environmental pollution through chemical waste (Lyu et al., 2021). In the context of sportswear, sustainability challenges are becoming more complex due to the high reliance on synthetic materials such as polyester, which are petroleum-based and difficult to decompose. Another study notes that this synthetic material is also a major source of microplastic release into the ocean during the washing process (Napper & Thompson, 2016).

Strategies to improve sustainability in sportswear involve an approach at the level of materials, designs, and consumption patterns. For example, the development of plant-based fibers such as polylactide or biodegradable fibers shows great potential to replace conventional polyester (Luoma et al., 2022). At the design level, research by Radhakrishnan (2021) underscores the importance of applying circular economy principles in the fashion industry, such as prioritizing modular designs that

allow for material repair and recycling. This principle seeks to reduce the carbon footprint of fashion products by extending their lifespan and minimizing waste. Sustainable practices in sportswear, such as using recycled polyester, organic cotton, and eco-friendly dyes also pose appeal, but they face constraints such as cost and technology limitations.

Consumer involvement is also a factor in driving sustainability. Research by (Neumann et al., 2021) found that young consumers are increasingly paying attention to the sustainability of the products they buy, although price is still a major constraint. In response, several global brands are starting to offer recycling programs for old products as an incentive for consumers to participate in the circular economy. This step has also been proven to be effective in increasing consumer loyalty to brands that are considered to care about sustainability. Consumer interest in sustainable fashion is also growing globally. Recent research shows that consumers are increasingly willing to pay premiums for sustainable choices, although price remains a major barrier, especially in low-income markets (Joy et al., 2012). This trend shows the potential for sustainable sportswear to gain market share in Indonesia, as long as cost-effective and easily accessible options are available.

Sustainability in sportswear must also consider social aspects in addition to the environment. Research by Brooks (2015) explains that the fashion industry often neglects the welfare of workers in its supply chain. Therefore, sustainability practices must include the use of environmentally friendly materials while ensuring fair working conditions for workers. By integrating technological innovation, consumer education, and a commitment to social justice, the sportswear industry can reduce its negative impact on the environment while creating more ethical and sustainable products.

In Indonesia, fashion industry contributes significantly to its economy, particularly as a major textile exporter. However, the sector is also responsible for significant environmental degradation due to the use of non-renewable resources, excessive water consumption, and pollution from synthetic dyes. Indonesia ranks among the top ten largest textile waste contributors globally, with much of this waste ending up in landfills or the ocean (Putra, 2016).

Sustainability efforts in the industry are emerging but uneven. The government's Green Industry Standard initiative and the adoption of circular economy principles by some businesses aim to reduce environmental impact. Yet, these measures are often hindered by limited resources, lack of technical expertise, and minimal enforcement in small and medium enterprises (SMEs), which dominate the Indonesian fashion market (Sarasi et al., 2023).

Traditional fashion segments, such as batik, have made strides in adopting eco-friendly practices, such as natural dyeing processes and sustainable material sourcing (Ayu Kusumawardani et al., 2024). However, the sportswear segment remains relatively underdeveloped in its sustainability journey. Brands catering to sustainable sportswear face challenges in scaling operations while maintaining affordable prices, which is crucial in the price-sensitive Indonesian market.

Sustainable Consumption Patterns in Emerging Markets

Sustainable consumption patterns in emerging markets are becoming an important focus in research on environmental economics and consumer behavior. Emerging markets have great potential for adopting sustainable consumption, but they face unique challenges such as economic inequality, lack of awareness, and limited access to sustainable products. Research by de Jong et al. (2018) shows that the adoption of sustainable consumption patterns is highly dependent on a combination of factors such as price, cultural preferences, and the availability of local products. Sustainable consumption is identified through the purchase of eco-friendly products, waste reduction, and efficient use of resources.

In emerging markets, including Southeast Asia, sustainable consumption patterns are shaped by a complex interaction between cultural, socio-economic, and educational factors. Studies from diverse contexts highlight that while consumers are becoming more environmentally conscious, actual purchasing behavior varies greatly depending on affordability and accessibility. In addition, other studies have also shown that limited infrastructure plays a role in limiting the implementation of sustainability. In the study (Shibin et al., 2016) it was explained that the lack of effective recycling systems in developing countries can hinder consumers' ability to participate in environmentally friendly consumption. In contrast, some markets are showing success through community approaches, such as community-based recycling programs and economic incentives to reduce household waste.

According to studies on sustainable consumption in Asia, including those conducted by (Legere & Kang, 2020) and Gwozdz et al. (2017), younger consumers tend to show higher levels of awareness

and willingness to support sustainable products, although this interest is often not fully translated into purchasing behavior due to high product prices and limited availability. A similar trend is observed in Indonesia, where consumer behavior around sustainability is still emerging and is often concentrated in urban areas (Sheth et al., 2011). Consumers in these settings may express positive attitudes towards eco-friendly products but are price-sensitive and may need more information and education about the environmental benefits of sustainable choices (Rezai et al., 2013).

The role of technology in supporting sustainable consumption patterns in emerging markets is also a major concern. According to research by (Liao et al., 2024), the use of digital platforms to promote sustainable products and provide easily accessible information has increased consumer awareness and participation, especially among the younger generation. With the increasing penetration of the internet in developing countries, the opportunity to promote sustainable consumption through e-commerce has become more significant. Government policies and collaboration with the private sector are also important factors in promoting sustainable consumption. Research by (Vassileva, 2022) shows that subsidies for environmentally friendly products, tax incentives for sustainable businesses, and public education campaigns can encourage changes in consumer behavior. However, the success of these initiatives requires strong coordination between various stakeholders, including local communities, to create long-term impact.

Consumer Attitudes Toward Sustainable Sportswear

Consumer attitudes towards sustainable sportswear are an important issue in the study of ethical consumption, especially in an era that is increasingly concerned about environmental impacts. Global studies show that attitudes towards sustainable sportswear are shaped by a mix of personal values, social influences, and product characteristics such as quality and durability (X. Zhang & Dong, 2020). Sustainability in sportswear is slower to gain momentum as consumers often prioritize performance, style, and affordability over environmental considerations (Chakravarty et al., 2024). In Southeast Asia, a similar pattern is observed, where consumers are aware of sustainable products but may doubt their quality or performance compared to traditional alternatives.

Kong et al. (2016) explained that knowledge derived from trustworthy sources, such as transparent corporate marketing campaigns, is able to increase consumer interest and trust in sustainable products. In addition to knowledge, there are key motivations that include environmental awareness, product quality, and incentives such as discounts or promotions (Baier et al., 2020). However, barriers such as higher prices compared to conventional products and the lack of availability of sustainable products in the market are significant challenges. Demographic factors such as gender also affect consumer attitudes. Research by B. Zhang et al. (2021) shows that women tend to have a more positive attitude towards sustainable clothing than men, because they are more concerned about environmental and sustainability issues. In addition, the younger generation is more likely to adopt this product due to the high exposure to information through digital media

In Indonesia, this phenomenon reflects a broader regional trend, with younger urban consumers showing interest in sustainable sportswear but hesitant to commit fully due to concerns about durability and cost. Indonesian consumers are becoming increasingly aware of sustainability issues, with younger generations driving this shift. Studies by Abbate et al. (2023) and Kurniaty et al. (2024) highlight that urban, middle-income millennials and Gen Z consumers in major cities such as Jakarta, Bandung, and Surabaya are more likely to consider sustainability in their purchasing decisions. However, this awareness does not consistently translate into purchasing behavior due to affordability, limited product availability, and perceived trade-offs in quality and performance.

Affordability and Price Sensitivity

Price remains the dominant factor influencing purchasing decisions in Indonesia. Sustainable sportswear products are generally perceived as luxury items due to their higher costs compared to conventional apparel (Dinh, 2020). Over 70% of Indonesian consumers prioritize price over sustainability in their purchasing decisions, particularly for non-essential items like sportswear (Daffa & Sanjaya, 2022).

Efforts to lower production costs through local sourcing and innovative materials are essential for market growth. For instance, bamboo fibers and recycled PET plastics are being explored as cost-effective alternatives that align with environmental goals (Wang & Shen, 2017). However, these

innovations require greater adoption by both global and local brands to achieve scale and affordability.

Cultural and Social Influences

Indonesia's collectivist culture significantly influences consumer behavior, with family and community recommendations playing a pivotal role in purchasing decisions. (Pithaloka et al., 2024) found that peer influence, particularly within fitness communities and social media groups, is a key determinant for adopting new products, including sportswear. Sustainable brands that engage with local fitness influencers and communities could leverage this dynamic to increase product adoption.

Performance and Durability Concerns

Sportswear consumers in Indonesia highly value product performance, including durability, comfort, and moisture-wicking capabilities. Sustainable alternatives are often perceived as lacking in these attributes, making consumers hesitant to switch. Education and awareness campaigns emphasizing the technical advancements of sustainable sportswear, such as recycled polyester that offers similar performance to conventional materials, could help shift consumer perceptions.

Studies in other emerging markets show that, alongside educational campaigns, innovative marketing and product design can play a role in changing this perception, helping sustainable sportswear become a more viable option (Rusniati, 2019). With increasing access to digital technology, e-commerce is becoming an important platform in promoting sustainable sportswear. The use of technology to provide transparent product information, such as the origin of raw materials and the carbon footprint of products, can strengthen consumers' decisions to buy sustainable products (Lin & Chen, 2022).

Barriers and Opportunities for Sustainable Sportswear in Indonesia

The barriers to sustainable sportswear adoption in Indonesia mirror what is seen in other emerging markets, where affordability, lack of availability, and limited consumer awareness create challenges. The implementation of sustainability practices in the sportswear sector in Indonesia faces various obstacles stemming from low consumer knowledge about sustainability, limited supporting regulations, and lack of supporting systems such as recycling and distribution infrastructure. A study by Gunawan et al. (2022) shows that similar barriers are also found in similar fashion sectors, where the lack of consumer awareness is a major challenge in encouraging sustainability practices.

Based on the supply chain, sustainability is often difficult to achieve due to the reliance on synthetic materials such as polyester which are not easily degradable and require high resources. Kong et al., (2016) explained the importance of integrating environmentally friendly technologies and strengthening policies that support sustainability in the textile and apparel supply chain. In Indonesia, the adoption of this technology is limited due to high costs and lack of incentives for producers to invest in sustainable materials. The high production costs for sustainable materials and the logistical challenges of distributing these products across different regions are also significant barriers (Jaeger & Upadhyay, 2020).

However, studies on sustainable consumption show that digital platforms and influencer marketing can increase awareness and promote sustainable sportswear, especially among younger urban consumers (Kumar & Polonsky, 2017). For example, Kang et al. (2013) found that social media plays an important role in shaping sustainable purchasing decisions among youth in emerging markets, suggesting that a similar approach can be effective in Indonesia. In addition, innovations in sustainable materials, such as the development of biodegradable and recycled fabrics, present an opportunity to create affordable and sustainable sportswear tailored to a cost-sensitive market.

Despite rising awareness of sustainability in fashion, specific knowledge about sustainable sportswear remains limited. Kurniaty et al. (2024) reported that while 60% of surveyed urban Indonesians had heard about sustainability in fashion, only 30% could identify specific sustainable practices or brands in sportswear. This gap highlights the need for targeted education that not only raises awareness but also equips consumers with the tools to make informed purchasing decisions.

Local campaigns have made some progress in educating consumers about eco-friendly practices. Initiatives by groups such as *EcoBatik* have successfully promoted sustainable practices in traditional fashion, but these efforts have yet to extend meaningfully to the sportswear market (Ayu Kusumawardani et al., 2024). Expanding these campaigns to include sportswear could help raise

awareness of the environmental and personal benefits of sustainable options. But still, there are several problem about slow adoption of sustainable sportswear in Indonesia. It is driven by several interrelated barriers:

Limited Availability

Sustainable sportswear options remain limited in Indonesia, with international brands like Adidas and Nike offering sustainable collections at premium prices. These products are often inaccessible to the majority of consumers in secondary cities and rural areas (Ayu Kusumawardani et al., 2024). Local brands such as *Sejauh Mata Memandang* have demonstrated potential in promoting sustainability but primarily focus on casual wear rather than performance-oriented sportswear.

High Production Costs

Sustainable materials, such as organic cotton and recycled polyester, involve higher production costs due to their limited supply chains and technical requirements (Shen, 2021). This translates to higher retail prices, further alienating price-sensitive consumers. Scaling up local production of sustainable materials could help mitigate these costs.

Perception Issues

Consumer preferences also play a role in directing the development of sustainable sportswear. According to research by Baier et al. (2020) consumers who are conscious of sustainability are more likely to choose eco-friendly products, but are often hampered by higher prices and limited product availability. An effective marketing strategy is needed to increase awareness and encourage consumers to prefer products that support the environment (Apaza-Panca et al., 2024). Technology and infrastructure are also a major challenge in promoting sustainability. Developing countries often lack adequate recycling infrastructure, which hampers waste reduction efforts in the textile and apparel sectors (B. Zhang et al., 2021). With the increasing internet penetration in Indonesia, e-commerce can be leveraged to market sustainable sportswear products more broadly, while providing information about the environmental benefits. Indonesia also have several opportunities to growth in the context of sustainabile sportswear.

Leveraging E-Commerce and Digital Platforms

Indonesia's rapidly growing digital economy presents a significant opportunity to promote sustainable sportswear. Platforms like Tokopedia, Bukalapak, and Shopee are increasingly becoming the primary shopping channels for younger consumers (Ahidin, 2019) Sustainable sportswear brands can use these platforms to reach a broader audience, coupled with digital marketing campaigns that emphasize affordability and environmental benefits.

Community and Influencer Engagement

Collaborating with local fitness influencers and sports communities can create social proof and drive demand for sustainable sportswear. This approach aligns with Indonesia's collectivist values, where peer recommendations play a significant role in decision-making (Pithaloka et al., 2024)

Material Innovation and Localization

The development and use of locally sourced, sustainable materials such as bamboo fibers and recycled plastics can reduce costs while meeting performance expectations . Localizing production through partnerships between international and domestic players could further enhance affordability and accessibility.

Policy and Incentives

Public-private partnerships and government incentives can accelerate the adoption of sustainable practices. Tax breaks for sustainable brands, grants for local innovators, and stricter environmental regulations for conventional textile producers could create a more favorable environment for sustainable sportswear (Saepudin et al., 2020)

In addition, limited government and institutional support for sustainable practices limits wider adoption in the market. Collaboration between the private sector and the government is also an important factor to overcome these obstacles and take advantage of the opportunities that exist. VASSILEVA (2022) explained the importance of tax subsidies and incentives to support sustainable business, as well as the need for educational campaigns to increase public awareness. In Indonesia, similar initiatives can have a significant impact if supported by strong public policies and the support of local communities.

To foster the growth of sustainable sportswear in Indonesia, stakeholders need to address both supply- and demand-side challenges. On the supply side, increasing investments in sustainable textile production and distribution networks will help lower costs and improve accessibility. On the demand side, targeted education and marketing strategies are essential to shift consumer perceptions and behavior. Furthermore, collaborative efforts between the government, private sector, and NGOs can create a supportive ecosystem for sustainability in the sportswear market.

Summary of Key Findings

The reviewed literature reveals that sustainable sportswear is gaining momentum globally, although consumer adoption is uneven, especially in emerging markets where affordability and awareness remain key challenges. In Indonesia, as in other similar markets, younger consumers in urban areas express a growing interest in sustainable sportswear, though barriers related to cost, perceived quality, and limited availability are significant. To advance sustainable sportswear in Indonesia, stakeholders should consider strategies that leverage digital marketing, influencer engagement, and targeted consumer education to enhance awareness and interest. Furthermore, industry efforts to develop cost-effective, eco-friendly materials and supply chains are crucial for broadening the appeal and accessibility of sustainable sportswear.

Journals and Articles Used

This study uses the Systematic Literature Review method to determine the direction of trends and the future of the use of sustainable sportswear in Indonesia. A Systematic Literature Review (SLR) based on the provided journal articles about trends and the future of the use of sustainable sportswear can be seen through this table.

Table 1. Provided Journal Articles								
Author (Year)	Title	Source	Main Indicators	Method	Main Findings	Further Readings	Suggestions	
(Dinh, 2020)	The Effect of Sustainable Fast Fashion Marketing on Purchasing Decision	Researchgat e	Sustainable marketing, purchasing decisions	Quantitativ e	Sustainable marketing strategies positively influence consumer purchasing decisions for fast fashion.	Explore strategies in slow fashion.	Investigate long-term consumer loyalty driven by sustainable marketing strategies.	
(Sarasi et al., 2023)	Sustainable supply chain of Indonesia's textile & apparel industry: opportunitie s and challenges	Research Journal of Textile and Apparel	Supply chain, textile industry, sustainabilit y	Qualitative	Indonesia's textile industry faces logistical and policy challenges in achieving sustainabilit y.	Analyze supply chains in other ASEAN countries.	Suggest government incentives for textile producers adopting sustainable practices.	
(Brewer, 2019)	Slow Fashion in a Fast Fashion World: Promoting Sustainabilit y and Responsibili ty	MDPI Laws	Slow fashion, sustainabilit y, consumer responsibilit y	Qualitative	Educating consumers and integrating cultural shifts can drive slow fashion adoption.	Investigate economic factors influencing slow fashion adoption.	Focus on creating a global slow fashion certification to enhance consumer trust.	
(Niinimäki et al., 2020)	The environmen tal price of	Nature Reviews Earth &	Environmen tal cost, fast fashion,	Review	Fast fashion contributes significantly	Examine the impact of new eco-	Suggest conducting cross-	

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	fast fashion	Environment	pollution		to environment al degradation, particularly in water and waste management	friendly materials.	industry comparisons for resource- intensive manufacturin g processes.
	Managing water sustainabilit y in textile industry through adaptive multiple stakeholder collaboratio n	Water Research	Water sustainabilit y, stakeholder collaboratio n	Mixed Methods	Collaboratio n among stakeholders improves water sustainabilit y practices in the textile industry.	Analyze similar practices in other industries.	Study the scalability of adaptive models across regions with varying levels of water scarcity.
(Neumann et al., 2021)	Sustainabilit y efforts in the fast fashion industry: Consumer perception, trust, and purchase intention	Sustainabilit y Accounting, Management and Policy Journal	Consumer perception, trust, purchase intention	Quantitativ e	Trust mediates the relationship between consumer perception and purchase intention in the context of sustainable fashion.	Investigate the role of cultural differences in consumer trust.	Explore the long-term impact of consumer education on sustainability in fast fashion.
(Brooks, 2015)	Clothing Poverty	Book	Global inequality, fast fashion impact	Review	Fast fashion perpetuates global inequality by exploiting labor and resources in developing countries.	Refer to works on global trade ethics.	Suggest a framework for equitable trade practices in the global textile industry.
(Lin & Chen, 2022)	Factors That Influence Consumers' Sustainable Apparel Purchase Intention: The Moderating Effect of Generationa I Cohorts	Sustainabilit y	Sustainable apparel, generational differences	Quantitativ e	Generational differences significantly moderate sustainable purchase intentions, with younger cohorts showing higher preferences for sustainabilit y.	Compare findings across cultural contexts.	Explore the impact of digital marketing on generational preferences for sustainable fashion.
(Gunawan et al., 2022)	Institutional Barriers and Facilitators of Sustainabilit y for Indonesian Batik SMEs: A Policy Agenda	Sustainabilit y	Institutional barriers, batik SMEs, sustainabilit y	Qualitative	Institutional policies significantly influence the adoption of sustainable practices in Indonesian Batik SMEs.	Refer to studies on traditional craft industries.	Suggest integrating traditional knowledge with modern sustainable practices for better policy formulation.

(Pithaloka et al., 2024)	Factors Influencing the Adoption of Sustainable Practices: Fashion Brand MSMEs in Jakarta	Innovative: Journal Of Social Science Research	Sustainable practices, MSMEs, Jakarta	Qualitative	MSMEs in Jakarta adopt sustainable practices based on financial incentives and consumer awareness.	Analyze rural vs urban MSME adoption patterns.	Suggest measures to improve access to funding and resources for MSMEs adopting sustainability
(Kurniaty et al., 2024)	Sustainable Lifestyle: Indonesian Consumer's Behavior Toward Sustainable Fashion Consumptio n	Journal of Applied Business Administrati on	Sustainable consumptio n, Indonesian consumers	Quantitativ e	Indonesian consumers are increasingly adopting sustainable fashion driven by awareness and affordability.	Compare sustainable behaviors across ASEAN consumers.	Explore the influence of digital platforms on sustainable consumption in Indonesia.
(Abbate et al., 2024)	Sustainabilit y trends and gaps in the textile, apparel, and fashion industries	Environment , Developmen t and Sustainabilit y	Sustainabilit y trends, textile industry gaps	Review	Highlighted gaps in implementin g sustainabilit y practices across textile and apparel industries globally.	Refer to studies on emerging textile technologies	Suggest collaborative approaches between governments and industries to address sustainability gaps.
(Kusumaward ani et al., 2024)	Readiness in implementin g green industry standards for SMEs: Case of Indonesia's batik industry	Heliyon	Green industry standards, batik industry	Case Study	SMEs face challenges in implementin g green industry standards due to limited resources and awareness.	Study readiness in other SME sectors.	Recommend capacity- building programs for SMEs transitioning to green industry standards.
(Ray & Nayak, 2023)	Marketing Sustainable Fashion: Trends and Future Directions	Sustainabilit y	Sustainable marketing, fashion trends	Review	Highlighted the role of digital platforms and AI in promoting sustainable fashion trends.	Examine technology integration in other industries.	Explore AI- driven personalizati on to enhance consumer engagement with sustainable fashion.
(Søderlund & Berg, 2015)	Slow Fashion in the Sports Apparel Industry	International Conference On Engineering And Product Design Education	Slow fashion, sports apparel	Qualitative	Slow fashion in sportswear has niche potential but faces challenges from mainstream fast fashion competitors.	Investigate collaborativ e models with global brands.	Suggest integrating slow fashion with performance -oriented sportswear technologies.
(Wang & Shen, 2017)	A Product Line Analysis for	Sustainabilit y	Eco-design, product line analysis	Case Study	Eco- designed products	Compare with non- outdoor	Explore cost- effective eco- design

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	Eco- Designed Fashion Products: Evidence from an Outdoor Sportswear Brand				increase brand differentiati on and consumer loyalty but require higher initial investment.	brands.	methods for large-scale production.
(Blas Riesgo et al., 2023)	Drivers and Barriers for Sustainable Fashion Consumptio n in Spain: A Comparison between Sustainable and Non- Sustainable Consumers	International Journal of Fashion Design, Technology and Education	Drivers, barriers, sustainable fashion	Mixed Methods	Key barriers include price and limited availability, while environment al concern drives sustainable consumer behavior.	Explore similar patterns in other European countries.	Suggest public awareness campaigns to address misconceptic ns about sustainable fashion pricing.
(Kim & Oh, 2020)	Effects of Perceived Sustainabilit y Level of Sportswear Product on Purchase Intention	Sustainabilit y	Perceived sustainabilit y, skepticism, brand reputation	Quantitativ e	Brand reputation mitigates consumer skepticism and positively influences purchase intention for sustainable sportswear.	Investigate skepticism across product categories.	Recommend strategies for improving brand transparency to reduce consumer skepticism.
(Nam et al., 2017)	Factors Influencing Consumers' Purchase Intention of Green Sportswear	Fashion and Textiles	Green sportswear, purchase intention	Quantitativ e	Environmen tal concern and perceived product value significantly drive green sportswear purchase intention.	Refer to studies on luxury green sportswear.	Explore demographic variations in green sportswear adoption patterns.
(Marques et al., 2019)	From Waste to Fashion - A Fashion Upcycling Contest	Elsevier B.V	Upcycling, fashion contests, waste reduction	Experiment al	Fashion upcycling contests increase consumer engagement and awareness about sustainable practices in waste management	Study consumer behavior post- contest.	Suggest creating year-round initiatives to maintain engagement with upcycling practices.
(Leclercq- Machado et al., 2022)	Consumer Patterns of Sustainable Clothing Based on Theory of Reasoned Action	Sustainabilit y	Theory of Reasoned Action, sustainable clothing	Quantitativ e	Attitudes and subjective norms are key predictors of sustainable clothing consumptio n patterns.	Examine cross- cultural applications of the theory.	Suggest integrating digital tools to influence subjective norms and attitudes toward sustainability

(Spindler et al., 2023)	Sustainable Consumptio n in Sports Fashion – German Runners' Preference and Willingness to Pay	Sustainable Production and Consumptio n	Sustainable sportswear, willingness to pay	Quantitativ e	German consumers show a high willingness to pay for sustainable sportswear, particularly when quality and performance are assured.	Compare with other sports demographi cs.	Recommend studies on marketing strategies targeting elite athletes for sustainable sportswear.
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CONCLUSION

This systematic review examines the potential for sustainable sportswear consumption in Indonesia, highlighting both significant barriers and opportunities within the market. As global awareness of environmental issues grows, demand for sustainable apparel, including sportswear, is increasing; however, challenges such as high costs, limited eco-friendly product availability, and varying consumer awareness hinder adoption, particularly outside urban areas. While younger, urban consumers express interest in sustainable sportswear, their purchasing decisions are influenced by factors like affordability, perceived durability, and social considerations. Addressing these challenges will necessitate a collaborative approach involving industry, government, and community initiatives, with brands leveraging digital platforms and influencer marketing to engage environmentally conscious consumers. Innovations in sustainable materials and government incentives could enhance access to affordable options. Future research should focus on understanding the cultural and economic contexts of Indonesian consumers to develop effective sustainable marketing strategies, while educational campaigns and public-private collaborations can promote sustainable consumption patterns. Ultimately, fostering a sustainable sportswear market in Indonesia presents both environmental and economic opportunities, positioning the country as a potential leader in sustainable fashion in Southeast Asia.

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