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Siviwe Tolokazi Jack, Lincoln John (Nic) Theo, Alettia Chisin

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Small, local, open, connected: Exploring cosmopolitan localism in sustainable fashion design

S. T. Jack^a, L. J. Theo^b, A. Chisin^c

^a Faculty of Informatics and Design, Applied Design, Cape Peninsula University of Technology, Cape Town 8001, South Africa. jacks@cput.ac.za

^b Faculty of Informatics and Design, Media Department, Cape Peninsula University of Technology, Cape Town 8001, South Africa. theolj@cput.ac.za

^c Faculty of Informatics and Design, Applied Design, Cape Peninsula University of Technology, Cape Town 8001, South Africa. chisina@cput.ac.za

Abstract

The fashion design sector stands to gain from embracing cosmopolitan localism (CL), allowing designers to merge global trends with local cultures. This strategy fosters distinct, sustainable identities that resonate with their communities. This literature review focused on sustainable fashion design practices, searching the literature in databases that included Google Scholar, IEEE Xplore, ACM Digital Library, SpringerLink and ScienceDirect. The review emphasizes the relationship between traditional craftsmanship, innovation and minimizing environmental impact through global and local collaborations. Of 169 articles that met the basic eligibility criteria—focusing on sustainable practices such as ethical sourcing and consumer engagement—only five authors discussed CL. This reveals a notable gap in the literature regarding the in-depth application and evaluation of CL in sustainable fashion design. Nonetheless, key principles are apparent, such as strengthening supply chain connections to promote ethical practices, fair wages and sustainable sourcing; fostering meaningful consumer relationships through narrative-driven brand communication and values-based messaging to build brand loyalty and encourage lasting purchasing behaviours; and participating in global sustainability initiatives while remaining informed about best practices and industry standards. This clarifies how supply chain dynamics and consumer engagement impact sustainable fashion. This review examines recent applications of small, local, open, and connected (SLOC) principles in sustainability research, emphasizing their role in adapting global influences on local cultures and values. Furthermore, it emphasizes the interrelations among supply chain dynamics, consumer engagement and global sustainability frameworks in promoting a more sustainable fashion industry.

Keywords: Sustainable fashion, Sustainable design practices, Cosmopolitan localism

Introduction

Cosmopolitan localism is a concept that blends global perspectives with a strong connection to local communities (Manzini & M'Rithaa, 2016). It emphasizes preserving and promoting regional cultural diversity while fostering cross-cultural exchange and understanding. Combining global ideas and ethics with local cultural traditions and identities aims to create a sense of belonging to a global community while appreciating local distinctiveness (Corsini & Moultrie, 2021). Cosmopolitan localism originated in the 1990s as a response to “cultural evaporation” (Sachs, 1999). Since then, it has evolved into a framework for sustainable design practices, integrating global viewpoints with local commitments (Manzini, 2011). This approach encourages using local materials, traditional techniques and renewable energy sources to reduce environmental impact while preserving cultural identity (Fiala, 2019). A key concern is that ideas like cosmopolitan localism, which are gaining traction in design, are still quite new in fashion and must establish strong conceptual foundations. In seeking a new direction, an integrated approach to sustainability

recognizes that empowering local communities through sustainable practices may result in a fairer distribution of benefits and help address social justice issues (Schismenos et al., 2020) while also driving a move towards a more inclusive, equitable and resilient fashion industry in which fair trade initiatives dominate. This, in turn, may ensure that producers, especially those in developing countries, receive a fair price for their work, helping to address inequalities in the fashion industry.

To unlock the full potential of cosmopolitan localism in fashion, it is vital to identify and analyze its integration into sustainable fashion practices. Researchers and designers can create more effective strategies for sustainable and culturally relevant fashion by understanding the specific methods aligned with cosmopolitan localism. Investigating the challenges and opportunities of implementing cosmopolitan localism in the fashion sector can guide future research and policy development. There has been a notable growth in publications about sustainable fashion in recent years. The current research reviews the literature to assess how this growth includes a focus on merging global knowledge with local fashion sustainability needs, thereby implicitly reflecting some core aspects of cosmopolitan localism. This article explores the connection between fashion theory and practice, as discussed in the available literature, and the principles of cosmopolitan localism, highlighting its importance for achieving sustainability in the fashion industry. Specifically, this research seeks to answer the following questions:

RQ1 - Which sustainable design practices have been documented within a cosmopolitan localism framework?

RQ2 - How do these practices address sustainability's local environmental, social and economic aspects?

Identifying what might be termed 'cosmopolitan localism' in sustainable fashion practices

Cosmopolitan localism is too imprecise and widely contested to serve as a definitive register of interactions between local communities and other communities, either for a historical empirical inquiry or as an ethical mandate (Simpson, 2005). It is, therefore, not obvious how the idea might have been incorporated into the scholarship of fashion without a deeper analysis of how the ideas that lie implicit in the framing have been discussed in the literature. Without such analysis, it becomes difficult to derive coherent strategies that account for how culture, economy and ecology might be implemented so that the fashion industry might have a less negative long-term influence on the environment, as Moorhouse and Moorhouse (2018) recommend creating in the context of sustainable development, and at the same time so that sound design ideas, such as those discussed by Fletcher (2010), might be conceived and implemented to promote social change and create more sustainable products in the fashion industry.

For example, one solution widely touted has been slow fashion for sustainability and ethical fashion practices (Jung & Jin, 2014), where slow fashion is a vision of sustainability in the fashion industry based on current values and aims (Fletcher, 2010). However, a nuanced understanding of whether and how a proposed solution like slow fashion would incorporate all the variables involved must, of necessity, be based on the acknowledgement that the challenges of incorporating sustainable design practices are broad and multifaceted and that addressing these challenges will require a collaborative effort from designers, corporations, legislators and society (Di Monte-Milner & Breytenbach, 2014). It would seem at first glance that this is almost impossible to do without one of at least two pre-existing circumstances:

- A centralized entity should provide coherent and coordinated guidance for the widespread adoption of slow fashion or
- Develop a conceptual framework that incorporates several factors from different locations and practices within the fashion industry. Such a framework would allow stakeholders to create tailored strategic plans suited to their contexts, promoting better practices (Peirson-Smith & Craik, 2020).

Option 1 is unlikely because no global system currently supports a strategic approach to sustainable design. For sustainable design methods to be successfully implemented, they must encompass environmental, social and economic considerations to mitigate negative impacts on ecosystems and enhance social well-being.

While Option 2 offers a pathway for addressing these challenges, it necessitates a clear understanding of the relevant variables to develop a framework to support efforts to overcome difficulties. This, in turn, could lead to a more sustainable future that safeguards our environment and enhances everyone's quality of life.

Additionally, before advocating for slow fashion as a solution to sustainability, it is crucial to find a creative balance that connects a specific community while remaining receptive to global exchanges of ideas, people and products, which aligns with the principles of cosmopolitan localism. This entails acknowledging the importance of sustainability and recognizing the challenges that hinder the effortless integration of sustainable fashion design practices. A thorough understanding of the fashion industry's landscape is vital to facilitate social innovations that contribute to the establishment of strong, decentralized socio-technical systems, as suggested by cosmopolitan localism. This approach requires examining the interrelation of ideas, culture and physical presence. The current literature review is the starting point for mapping recent research on sustainable fashion design practices. It does so by integrating various theories related to cosmopolitan localism into sustainable fashion design. This includes transcending geographical barriers while preserving local identity and promoting environmental responsibility, as noted in the literature. This framework enables designers to create environmentally conscious clothing that also highlights the unique cultural heritage of their communities.

Identifying and reviewing the literature

The starting point for this analysis is a South African take on cosmopolitan localism, which, in the first instance, lies in a comparative study by Dickson et al. (2016) in consideration of the extent of industry stakeholders' involvement in sustainability and their demand for sustainable apparel and textile products from South Africa. This study demonstrated that several local environmental, social and economic hurdles inhibit sustainable fashion design practices, which suggests a challenge to the universal application of Manzini's (2011) framework for achieving local environmental sustainability. Manzini's (2011) framework, a fundamental contribution to sustainable design, presents a comprehensive approach considering social, environmental and economic factors. This paradigm emphasizes creating products and systems that meet functional requirements and contribute to a more sustainable and fair future (Manzini, 2011). It encourages designers to analyze a product's complete life cycle, from material extraction to disposal, and to seek opportunities to reduce environmental effects while increasing social benefits. Manzini's methodology, which adopts a "systems thinking" perspective, enables designers to produce unique solutions that manage difficult challenges and promote sustainability.

This challenge to universality suggests a need for a deeper exploration of the rich and complex epistemic terrain that encompasses the burgeoning field of sustainable fashion design to better identify the extent to which recent scholarship on sustainability implicitly reflects the tenets of cosmopolitan localism as fostering

community engagement and a sense of shared responsibility for long-term development (see Bonsu et al., 2022; Fiala, 2019; Kossoff, 2019; Opoku et al., 2022; Schismenos et al., 2020).

In an initial informal review, it soon became apparent that only some authors have dealt specifically with its fashion application. This pre-empts the need to illuminate the possibilities and challenges inherent in applying this design philosophy to this domain, grappling with environmental responsibility and cultural expression. The most effective approach for this was deemed to be a comprehensive bibliometric analysis by way of a qualitative literature review and qualitative analysis based on the methodology proposed by Yang et al. (2017), following the steps of review planning, conducting, finding and reporting.

Identifying the relevant studies

The literature was gathered from the Google Scholar, IEEE Xplore, ACM Digital Library, SpringerLink and ScienceDirect databases and the design-specific database, ProQuest Design and Applied Arts Index. We also explored open-access repositories, such as ResearchGate and Academia.edu. Combining these databases ensures a thorough search and captures studies from various academic disciplines and research communities that offer different perspectives on cosmopolitan localism in fashion.

After the initial searches, the results were filtered by publication date, relevance and publication type, such as research articles, book chapters and conference proceedings. We prioritized studies that explicitly addressed the intersection of cosmopolitan localism and sustainable fashion design. We also looked for studies that delve into specific aspects of interest, such as cultural representation, local production systems or environmental impact. Articles that only superficially mentioned social factors, with a significant emphasis on environmental sustainability, were excluded. Later, we used a snowballing technique to analyze references from relevant studies and identify new sources. We further considered grey literature, such as reports, white papers and industry publications.

Several initial broad searches with keywords related to design practices, fashion sustainability and similar words were identified to examine existing knowledge on various sustainability challenges in fashion design. The search period from 2014 to 2024 was used to gain a clear view of the literature over the past 10 years. We identified several studies that examined sustainable fashion in general. Few studies, however, focused on cosmopolitan localism in fashion, while most studies presented case studies of fashion sustainability focused on environmental concerns across the Global North. None of these articles focused on the Global South, particularly Africa. Studies covered China, the United Kingdom and the United States.

Relevant studies were selected using keywords. We started with the core terms *design practices* AND *cosmopolitan* AND *localism* AND *fashion* AND (sustainable OR sustainability OR balanced OR sustainable OR continual OR feasible OR supportable OR continuous OR viable) AND (challenges OR issues OR threat) AND (incorporation OR embodiment OR fusion OR integration).

As this resulted in only a small number of articles, we decided to expand the search to include search terms from the domains of social design and sustainable design, including [“Fashion”] AND [all: “design practices”] AND [all: cosmopolitan] AND [all: localism sustainable] OR [all: sustainability] OR [all: a feasible] OR [all: supportable] OR [all: viable] AND [all: challenges] OR [all: issues] OR [All: threat] AND [all: incorporation] OR [all: fusion] OR [all: integration] AND [title: fashion] AND [Title: sustainable] AND [e-publication date: (01/01/2018 to 23/02/2024)]. These searches sought literature at the intersection

of these domains that consider design and social sustainability (see Figure 1). All articles were examined up until February 2024. In Google Scholar, the first two pages for each search were retrieved for screening.

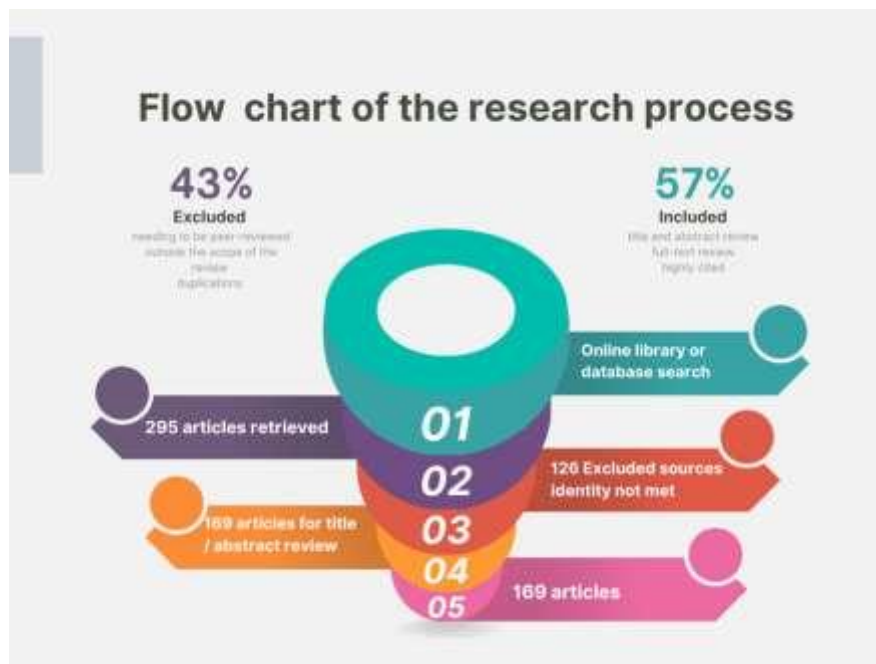


Figure 1: Flow chart of the research process.

The material was found in multiple online libraries and databases, including ScienceDirect, ACM Digital Library, SpringerLink, Google Scholar and IEEE Xplore, and 295 articles were retrieved. The title and abstract screening resulted in 126 sources (80 conference proceedings, 35 books, three book chapters, four reviews and four other reports) being excluded for reasons such as needing to be peer-reviewed, being outside the scope of the review, or being duplicates. This left 169 articles that proceeded to the next stage, in which their titles and abstracts were reviewed, resulting in 169 relevant articles that moved on to a full-text review on the basis that they were highly cited and relevant to fashion design practices and the founding ideas of cosmopolitan localism.

Overview of materials

Most articles are case studies (156 articles), conceptual articles (seven) or review articles (six). This is consistent with the emergent nature of this topic in that many articles are still exploring and clarifying the role of design concerning fashion sustainability.

Regarding the research context, most articles focused on environmental sustainability instead of fashion sustainability. While environmental sustainability addresses a wide range of issues, fashion sustainability specifically targets the fashion industry's environmental impact, with 34 articles not specifying the context. Fashion sustainability seems well suited to community-based projects where social relations are essential in design. The articles focused on projects in the Global North, with only a few from the Global South; however, many articles emphasized the relevance of sustainable fashion in designing for marginalized people. For example, Corsini and Moultrie (2021) noted: "Designers connected to this movement generally focused on disadvantaged industries of society, using alternative and appropriate technology and encouraging an efficient use of resources" (p. 8).



Figure 2: Theoretical illustration of the literature.

Results: Themes that emerged

The content analysis of the final 169 documents selected in the current study gave an overview of the literature supporting the “sustainable design practices” ideas, which were grouped into themes, namely Evaluation of sustainable fashion, Sustainable design practices, Successful adoption of sustainable design practices and Cosmopolitan localism.

Evaluation of sustainable fashion

The evaluation of sustainable fashion will be discussed based on the environmental and social difficulties of implementing sustainable practices within the fashion industry. This presents a shift away from the conventional methods of the fashion industry, which often contribute to environmental and social issues. Sustainable fashion focuses on minimizing the negative impacts of the fashion industry while promoting environmental and social responsibility. Adopting environmentally and socially responsible approaches throughout the whole life cycle of apparel and accessories is called “sustainability in fashion” (Thomas, 2020). Sustainable fashion design is closely aligned with the United Nations Sustainable Development Goals (SDGs). The fashion industry’s significant impact on the environment and society drives the need for sustainable design strategies to mitigate these negative effects and foster a more sustainable future. While there are 13 SDGs, this study focuses on the interconnection between SDGs 8 and 9. SDG 8 advocates for sustained, inclusive and sustainable economic growth alongside full and productive employment and decent work. In contrast, SDG 9 aims to develop resilient infrastructure, promote inclusive and sustainable industrialization and encourage innovation. The interplay between strong infrastructure and industrial development is vital for job creation and economic opportunities, which ultimately support SDG 8’s decent work and economic growth objectives. Furthermore, a skilled workforce is crucial for driving innovation and establishing a sustainable industrial framework, thus aiding SDG 9. Sustainability in fashion transcends individual components; it encompasses a holistic integration of sustainability principles throughout the

product life cycle. This thorough approach seeks to minimize the industry's environmental footprint and advance ethical practices across the supply chain.

Sustainability in fashion requires addressing multiple interrelated concerns, such as environmental impact, ethical labour practices, the circular economy, social impact and conscious consumerism (Khan et al., 2016). Pioneering works by Fletcher (2008), Sull and Turconi (2008), Clark (2008) and De Brito et al. (2008) initially appeared in the management literature around 2008. This became apparent after the Rana Plaza factory catastrophe on 24 April 2013, which was a tragic and significant event in the history of the garment industry (Ayatullah Hosne Asif, 2017). This eight-storey commercial building in Dhaka, Bangladesh, housed several clothing companies and other enterprises. The collapse resulted in one of the deadliest industrial disasters, claiming over 1100 lives and injuring countless more, primarily garment workers. This tragedy brought global attention to the unsafe working conditions and labour rights issues prevalent in the global garment industry, especially in developing countries like Bangladesh, a central hub for clothing production. The disaster catalyzed a significant shift towards sustainable fashion and ethical industrial practices (Ayatullah Hosne Asif, 2017).

The literature indicates that sustainability in fashion requires a comprehensive vision to identify opportunities for sustainable practices in fashion and design. This vision transcends focusing on just one industry element, highlighting the importance of a holistic and integrated approach. Central to this vision are sustainable design practices that foster the creation of fashion products that are environmentally and socially responsible, paving the way for a more sustainable future in the industry. Seasonal trends can impose restrictions on clothing design, limiting silhouettes and constraining creative concepts. Designers often draw motivation from challenges—such as difficult situations or disagreements—alongside opportunities for improvement or for introducing ideas previously overlooked. The effectiveness of sustainable design practices is heightened when they adopt an integrated approach throughout the product development journey. This broad perspective guarantees that environmental and social sustainability are embedded in the product's foundation, leading to more responsible, innovative and competitive offerings in a dynamic market. Thus, designers must recognize the potential outcomes of their design choices, underscoring the critical role of design function. Design decisions can have profound effects on fashion practices. Over the past two decades, sustainable design approaches have gained significant recognition, urgency and acceptance.

An overview of the structural development of the industry must be examined to research new design approaches and ways to produce value (Ræbild, 2021). Examining the fashion industry's structural evolution will enable designers and researchers to better understand sustainability-related challenges and opportunities within the sector. This insight can guide the creation of innovative design methods and strategies tailored to each country, fostering value that aligns with environmental and social sustainability objectives and ultimately promoting positive transformation in the fashion industry (see Fletcher, 2010). Textile and apparel production volumes have altered substantially during the last decade. However, there is inadequate research to identify the hurdles and challenges in putting sustainable design into practice (Hur & Cassidy, 2019). To overcome these challenges and promote sustainable design in fashion, increased research, collaboration and information sharing are essential. Researchers, practitioners and policymakers should unite to close the research gap, establish and advocate best practices and foster transparency and accountability across the industry. Such collaboration is crucial for steering the fashion sector towards more sustainable and responsible methodologies. South African fashion designers can enhance their environmental responsibility by incorporating transformable design techniques, such as garments that offer two or more functional and aesthetic variations (Rahman & Gong, 2016).

Sustainable design practices

Sustainable fashion design focuses on how designers can influence change through their main collection practices and their alignment with life cycle design strategies. Designers are crucial in promoting sustainability by making informed material choices and designing garments that last. When considering the social aspect of sustainable fashion, two important points emerge:

- There is a notable lack of consumer awareness about sustainability and relevant information on fashion products;
- The aim is to enhance consumer understanding of sustainability through effective communication, especially within South Africa.

Sustainable fashion design requires actions at each stage of the design process, from concept development to strategies for sourcing, recycling, reusing and repairing materials and new production technologies (Ban, 2020). Emphasizing the importance of integrating sustainability into the design process, designers must adjust their mindsets to function as promoters for the industry's transformation (Agarwal, 2020).

Sustainable design practices, such as zero waste, upcycling and reconstruction can be applied in fashion education to prepare the next generation of designers to address industry challenges and opportunities (Medcalfe & Miralles Miro, 2022). The fashion industry has faced significant challenges in balancing global sustainability goals with local community needs. While numerous global practices, such as design for sustainability, grassroots innovation, frugal innovation and transition design, have been developed to address these challenges, a disconnect between these approaches and local realities must often be addressed.

There is a strong correlation between sustainable practices and financial performance in fashion companies, showing that increased sustainability results in improved economic outcomes (Kam & Yoo, 2022). To ensure sustainability control within the entire fashion design cycle, all manufacturing processes, including finishing, should be conducted within a fashion company or a partnership company that can control every manufacturing process to ensure sustainability. Customers need help to distinguish between sustainable and non-sustainable fashion products due to the non-transparent labelling method used even for sustainable fashion (Daukantienė, 2023). This literature revealed the various global practices proposed for sustainable fashion, delving into the concepts of design for sustainability, grassroots innovation, frugal innovation and transition design, examining their potential contributions to sustainable fashion. By understanding these approaches, we can gain valuable insights into how to bridge the gap between global sustainability goals and local community needs within the fashion industry.

Successful adaptation of sustainable design practices

To develop a sustainable fashion industry, new technologies must be incorporated, collaborative consumption must be practised and existing clothing must be upcycled. Arrigo (2021) highlights that collaborative consumption provides an affordable and sustainable form of consumption. New technologies, such as microbial enzymes and bio-pigments, offer opportunities to minimize the environmental impact of textile production (Mazotto et al., 2021). Additionally, upcycling existing garments, as advocated by Gupta et al. (2021), can contribute to a more sustainable approach to fashion design. According to Murzyn-Kupisz and Hołuj (2021), fashion designers play a crucial role in making fashion more sustainable. Comprehensive fashion education should equip designers with the necessary knowledge and skills. It is possible to develop a theoretical framework that addresses the sustainability problem in the fashion industry by incorporating aspects such as collaborative consumption, technological advancements and upcycling to encourage sustainable design practices (see Monyaki & Cilliers, 2023).

Fashion sustainability aims to turn the fashion industry into a more responsible and ethical system, combining environmental preservation, social equality and economic viability (see Mukendi et al., 2020). This holistic strategy considers the entire life cycle of fashion goods and aims to benefit both people and the environment (Adamkiewicz et al., 2022). According to the literature, sustainability is usually related to contributions to economic, ecological and social factors (see Daukantienė, 2023). Despite well-documented negative environmental repercussions, the contemporary fashion system is still based on industrial capitalism, which is increasing resource throughput; in contrast, business, cultural tastes and ideas on desirability and realism all influence fashion purchasing (Fletcher, 2012).

This study suggests that more than technological innovations are needed to achieve true sustainability in the fashion industry. While technology can improve efficiency and reduce environmental impact, it may only address some underlying issues. This research emphasizes the importance of adopting the small, local, open and connected (SLOC) approach, which involves reducing environmental impact and improving quality control, shortening supply chains, reducing transportation emissions and supporting local economies. It also fosters collaboration, knowledge sharing and transparency within the industry and creates strong relationships between designers, artisans, consumers and communities (Radclyffe-Thomas, 2018).

Cosmopolitan localism

The literature highlights subtle distinctions in how sustainability interrelates with cosmopolitan localism and recent innovations that could reduce the environmental footprint of fashion design practices. Engaging with sustainable fashion through cosmopolitan localism reveals key areas such as sustainability education, competitive careers within the sustainable fashion sector and eco-friendly alternatives to traditional design methods. Achieving sustainability requires enhancing our quality of life while adopting sustainable practices, using fewer natural resources and revitalizing our physical and social environments. (Mukendi et al., 2020). SLOC are the characteristics that drive cosmopolitan localism (Manzini & M'Rithaa, 2016). These constructs emerged from over two decades of dialogue and real-world experiences, proving that sustainable solutions can be achieved by starting with local concepts and the communities they serve (Semi, 2021). While enhancing the technical components of fashion design is crucial, more is needed to solve the industry's sustainability concerns. Merging global trends with local production (cosmopolitan localism) is a start in the right direction, but true sustainability requires an emphasis on eco-friendly materials and ethical manufacturing techniques. The literature should still contextualize these trends from the fashion design perspective. The SLOC characteristics offer a valuable framework for discovering sustainable solutions, emphasizing the importance of local involvement, community participation and small-scale initiatives that foster human connections, democratic processes and a sense of belonging (Mukendi et al., 2020). The four keywords encapsulated in SLOC characterize these emergent qualities and the cases of socio-technical innovation on which they are based.

Small, local, open and *connected* and their consequences are easily understood but provide a new picture of how a sustainable, networked society may take shape. Fletcher and Vittersø (2018) suggest that the emerging concept of sustainability contains valuable insights to support a local fashion movement. By explicitly understanding how it can redirect what is made and bought by bending it towards more diverse practices and small-scale producers with regional supply networks, we can show how cosmopolitan localism manifests in fashion design practices from a sustainability perspective.

In fashion, being localized, small, connected and open to others' ideas, culture and physical presence promises social innovations that actively contribute to realizing resilient, distributed socio-technical systems (Manzini & M'Rithaa, 2016). Cosmopolitan localism may describe the complicated relationship between being small and being open. Examining the "complicated relationship" between being local and open can lead to an original and insightful contribution to the field (Manzini & Cipolla, 2021, p. 391). The

industry can view the relationship between its broader social and environmental contexts through a cosmopolitan localism lens and respond with a systems-based approach that integrates the design of everything from the concept stage through design and development to clothing production in the design of fashion clothing (see Manzini & M'Rithaa, 2016).

Discussion

The literature review revealed a growing interest in sustainable fashion design, focusing on environmental and social impacts. However, a significant gap exists in integrating global sustainability frameworks such as design for sustainability, grassroots innovation and frugal innovation with local, community-based approaches. Integrating cultural elements into fashion design raises important cultural intellectual property rights considerations. Respecting and acknowledging communities' cultural heritage and ensuring fair compensation for using traditional knowledge and designs is crucial. By understanding and respecting cultural intellectual property rights, designers can create sustainable fashion that celebrates diversity and promotes social justice. While these approaches share a common goal of promoting environmental and social responsibility, their specific focus and implementation strategies differ. Design for sustainability emphasizes an integrated approach to the entire product life cycle, while grassroots innovation prioritizes local solutions and community engagement. Frugal innovation focuses on resource efficiency and affordability, and transition design seeks to guide systemic change.

A significant gap in the existing literature is the lack of a comprehensive framework that integrates social design, sustainable design and cosmopolitan localism within the fashion industry, particularly in South Africa. While numerous studies have explored individual aspects of sustainable fashion, there is a need for a more holistic approach that considers the interconnectedness of these elements. This research addresses this gap by proposing a framework combining cosmopolitan localism principles with sustainable design practices. It highlights three key areas: ways to address local environmental, social and economic aspects, key challenges and opportunities for implementing sustainable design practices and sustainable design practices in a cosmopolitan localism framework. These findings provide critical insights into developing economies' challenges in transitioning to sustainable practices.

Ways to address local environmental, social, and economic aspects

Establishing strong relationships within the supply chain is crucial for implementing the SLOC characteristics for cosmopolitan localism in fashion design, ensuring ethical practices and sustainable sourcing. Building authentic connections with consumers through transparent communication and value-driven messaging can foster brand loyalty and promote sustainable consumption. Participating in global sustainability initiatives helps to stay updated on best practices and industry standards. While significant research exists on sustainable fashion, there needs to be a greater understanding of specific design practices and their implementation within a cosmopolitan localism framework. This study aims to bridge this gap by providing a comprehensive overview of design practice modes, identifying key features, barriers and opportunities, and outlining research themes and sub-themes explored in previous studies. By addressing these knowledge gaps, this research contributes to a deeper understanding of sustainable fashion design practices and their potential to drive positive change within the industry.

Key challenges and opportunities for implementing sustainable design practices

Although many fashion designers support the idea of sustainability within local fashion design companies, the findings still mention the key challenges, such as the high expense of these practices, which makes them very disheartening to adopt fully. Key challenges in implementing sustainable design practices in the fashion industry include the high cost of sustainable materials, the complexity of supply chains and the need for consumer awareness and demand for sustainable products (Smith et al., 2014). Balancing aesthetic appeal with environmental and social responsibility can be challenging. However, opportunities

abound. Fashion designers can create stylish and eco-friendly garments by embracing sustainable materials, innovative design techniques and circular economy principles (Ceschin & Gaziulusoy, 2016). Working with ethical suppliers and openly sharing sustainability initiatives with consumers fosters trust and encourages demand. By investing in research and development, businesses can achieve remarkable innovations while supporting local communities, enhancing supply chain resilience and minimizing environmental repercussions. Increased collaboration between global strategies and local actions is vital to bridging the divide between theory and practice (Braungart, 2021). This entails encouraging collaboration among international organizations, governments, corporations and local communities to create and implement globally relevant and locally adaptive plans. We can expedite the transition to a more sustainable fashion business by combining global initiatives with local needs and capacities. SLOC is a potential solution that emphasises quality control, decreased environmental impact, improved community connections and increased design creativity. By incorporating SLOC principles, the fashion industry can transition to a more sustainable and ethical future.

Sustainable design practices in a cosmopolitan localism framework

Integrating sustainable design into a cosmopolitan localism framework provides a promising solution to the intricate challenges in the fashion industry (Opoku et al., 2022). This approach merges global insights with localized actions, encouraging innovation, community involvement and environmental stewardship. These findings corroborate the results of previous studies that have shown the absence of a comprehensive and integrated framework that unifies concepts and principles from social design and sustainable design within cosmopolitan localism (see Bonsu et al., 2022; Fiala, 2019; Kossoff, 2019; Opoku et al., 2022; Schismenos et al., 2020). The power of the SLOC principles lies in their ability to paint a visionary picture of a better future for society when considered as a whole. While the individual components of SLOC might be readily understandable, their full impact and feasibility become evident when significant forces for change come into play. This finding corroborates Bonsu et al.'s (2022) observations in their article "Cosmopolitan localism as a research framework for sustainability in graphic design practices".

Future research should regard cosmopolitan localism as a design trend emphasizing aesthetics and production techniques. In contrast, the present study identifies cosmopolitan localism as a research paradigm that serves as a framework for analyzing and comprehending the entire fashion industry. It underscores the necessity for stronger links between social design, sustainable design and cosmopolitan localism. This study suggests that this integrated approach could foster meaningful change. While traditional research often focuses on problem identification, this study prioritizes the potential to create actionable insights. Consequently, it offers practical recommendations for the fashion industry to enhance its responsibility and influence by exploring the connections among social, sustainable and cosmopolitan local practices. Recognizing the fashion industry's entrenched issues, this study aims to transcend superficial changes by proposing solutions that tackle these fundamental challenges using cosmopolitan localism as its guiding principle.

The findings highlight the drawbacks of depending exclusively on technology while stressing the importance of a small, local, open, and connected strategy. Over years of discussion and implementation, the SLOC principles have become a key framework for sustainability. As expressed by others, the SLOC model emphasizes local expertise and community involvement as essential foundations for sustainable solutions. Although technological innovation in design is vital, it alone cannot ensure total sustainability. Genuine sustainability, as suggested by various scholars, requires a comprehensive approach that includes cosmopolitan localism, merging global trends with localized production by utilizing environmentally friendly resources and ethical manufacturing methods. Consequently, the SLOC approach emphasizes the crucial contributions of local communities and small-scale production. While the existing literature often prioritizes

technology for achieving sustainability in the fashion sector, this study advocates a more comprehensive strategy, asserting that incorporating SLOC principles is essential to tackle the diverse sustainability issues facing the industry effectively.

Conclusion

Effective local initiatives and community collaborations can implement sustainable design practices, such as sourcing eco-friendly materials, ensuring ethical production and applying circular economy principles. Moreover, fusing traditional craftsmanship and local cultural elements into contemporary designs leads to unique and sustainable fashion products. However, challenges such as a lack of awareness, limited resources and infrastructure constraints may hinder the implementation of sustainable design practices in South Africa. Promoting education and awareness campaigns, providing financial support and incentives and investing in sustainable infrastructure are essential to overcome these challenges. By working together, designers, manufacturers, consumers and policymakers can drive the fashion industry towards a more sustainable and equitable future.

Future research should expand upon the newly defined sustainable fashion design practices. Despite the useful framework provided by Mukendi et al. (2020), pinpointing a precise definition of sustainable fashion in the existing literature proved challenging. Their definition serves as a solid foundation, yet it solely addresses social sustainability in design, omitting the potential for achieving social sustainability through design. After conducting this literature review, we propose that sustainable fashion design practices encompass designs that enhance individual well-being and support societal prosperity now and in the future, thereby establishing a framework for guiding future studies. The literature points to the complex but essential process of developing relevant metrics, strategies and tools necessary for implementing sustainable design principles (see Bonsu et al., 2022; Fiala, 2019; Kossoff, 2019; Opoku et al., 2022; Schismenos et al., 2020).

For example, Smal (2017) re-evaluates the strategies for environmentally sustainable fashion design practices. Hanusch and Birkhofer (2010) emphasize the necessity for practical tools and approaches that support social sustainability during product development. Although they do not provide a detailed methodology, their analysis of socially sustainable products offers a valuable starting point. Gomes de Oliveira et al. (2022) highlight the substantial gap between sustainability practices and their attractiveness to consumers. While their emphasis on health and safety is significant, it is essential to include a broader perspective on social sustainability, covering aspects such as community health, fair labour practices and cultural preservation, as emphasized by Bonsu et al. (2022), for a more comprehensive understanding. This limited focus highlights the urgent need for broader frameworks, such as the SLOC model, which acknowledges the interconnectedness of social, cultural, economic and environmental aspects within sustainable fashion design.

This study examines how interconnected local strategies shape design decisions in the fashion industry, displaying their potential to reduce environmental impact while remaining globally relevant. It provides a comprehensive summary of sustainable fashion design approaches, supported by an extensive literature review. However, it is important to recognise the constraints of the selected research method. Further investigation into the practical applications of cosmopolitan localism is essential. Designers must critically assess its various facets and address its implementation challenges. Considering the current emphasis on qualitative case studies, interviews, literature reviews, quantitative experiments and survey research in sustainable design, developing a unique theoretical framework offers a promising avenue for future

research. A theory-based approach could significantly enhance the understanding and application of sustainable fashion design practices.

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