Development of Competences for the Fashion Designer: A Scope Review

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Abstract
Authenticity presents itself as the warp that interweaves the fashion system and other sectors of society. This dynamic finds in contemporary society the "era of lightness", a system of inconsistency, change, personalization, and seduction that is related to the fashion system. The transition from a production-oriented (industrial) society to a post-industrial society, where knowledge becomes the main factor of production, makes education even more relevant as a means for individuals to occupy their space in society and act on social and environmental issues. In this perspective, the objective of this work is to map the themes that permeate the competencies of Fashion Design professionals through a scope review. This strategy allows for an analysis of evidence on a particular research area, synthesizing the main concepts, theories, and knowledge gaps. To support the process, the study makes use of the PRISMA-P (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols), double-blind selection of works, and qualitative thematic analysis. This analysis is divided into five themes: employability; entrepreneurship and digital competencies; sustainability; research and development; production processes. The study's conclusion points to an interconnection of these themes in both the educational process and the professional life of the fashion designer, suggesting a trend toward interdisciplinarity or trans disciplinarity. Additionally, the study suggests a personalized education, with the development of curricula or other actions in coproduction between educational institutions and society sectors.

Keywords: Fashion Designer, Development of Competences, Scope Review

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Introduction

Social subjects express, day by day, through clothing, an appearance, or even an identity imbued with multiple meanings, constructed from images and symbols. In this somewhat communicative scene, there is a relationship of aesthetic pleasure between seeing and being seen. According to Sant'anna (2009, p. 49, our translation) "dressing is a dimension of communication in modern society" that is intrinsically related to what is consumed by this subject.

In a fashion-oriented society, consumption is at the heart of the current cultural system, where objects are presented as signs of an individual's personality (Sant'Anna, 2009). Fashion is thus a field of symbolic production with its respective centres of recognition and legitimacy, serving as an "expression of the values of modern culture," grounded in the notions of the new and individuality (Bergamo, 2007; Marques, 2014, p. 64). It is acknowledged that "the values and *cultural meanings of modernity*, particularly dignifying the *New* and the expression of human individuality, made the birth and establishment of the fashion system possible" (Lipovetsky, 2009, p. 7, our translation).

In this context, we will draw upon a historical overview of fashion, which, despite Lipovetsky (2009), presenting it in a linear fashion, hides a web of continuous and interconnected social transformations. This is presented in a didactic way in three phases: Aristocratic Fashion, Fashion of a Hundred Years, and Open Fashion (Marques, 2014). This historical perspective is valuable for understanding the context of the fashion designer.

The first phase occurs between the mid-14th century and the mid-19th century but is limited to a select group, the aristocracy, and is characterized by craftsmanship. During this period, artisans catered to their clients' requests, tailoring clothing to their tastes without innovative or proactive contributions from the artisan (Lipovetsky, 2009; Marques, 2014). Influenced by the Baroque era, fashion promoted the luxury of theatricality, emphasizing a narcissistic aesthetic, one of individualization.

Modern fashion only emerges in the second half of the 19th century. From this period until the 1960s, it's referred to as the "Fashion of a Hundred Years." The "first phase of modern fashion history" is led by Charles-Frédéric Worth, who founded his own house in Paris, where he prepared unique clothing items in advance, combining creative design with a promotional show, an initiative later known as *Haute Couture*[1] (Lipovetsky, 2009, p. 86). In this context, the simplification of women's attire by Chanel in the 1920s and the expansion of exports contributed to the rise of the power of the dressmaker/fashion designer.

From 1975 onwards, there was a decline in the production of custom-made clothing, altering the focus of *Haute Couture* from presenting new models to maintaining a tradition of luxury. This marked the rise of *prêt-à-porter*, characterized by industrial production with a focus on aesthetics and personalization (Lipovetsky, 2009, p. 148). *Prêt-à-porter*, with its professional creators, embodies a youthful, innovative spirit, increasing the democratization of fashion. It reduces mimetic subordination, brings fashion closer to advertising, allows for creative freedom, and offers a wider variety of models, enabling individuals to choose more

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[1] We understand *Haute Couture* as a fashion established by artistic dressmakers who created signature, original clothing using the finest fabrics, technical innovations, and exquisite craftsmanship. These garments were produced exclusively and tailored to measure, undergoing numerous fittings until their completion (Marques, 2014, p. 67, our translation).

affordable options. The excitement for the new and youth culture contributes to hedonistic values and a blend of styles (Lipovetsky, 2009; Marques, 2014).

Throughout these phases, one key figure stands out: the fashion product creator[2]. Initially, there was the craftsman, followed by the dressmaker/stylist, and ultimately a transition from stylist to fashion designer. The term stylist is associated with artistic recognition, innovative capabilities, authorship, and practical experience, as part of a field of "symbolic production" that links their name to the prestige that surrounds them, including the fashion objects they create. They are seen as artists "presumably free from economic pressures" but not without dependence on social mechanisms that "legitimize their understanding and acceptance" (Bergamo, 2007, pp. 49–53; Marques, 2014).

On the other hand, "the 'designer' is the solution - or verbalization - found for an effort to reconcile two fields: the artistic and the economic" (Bergamo, 2007, p. 49, our translation). This transition of terminology is supported by the emergence of the concept of the creative economy, which emphasizes uniqueness, symbolism, and intangibles, and thus requires a creative professional who integrates technology into this context (Marques, 2014).

This indicates a field in the process of consolidation. In addition to this, the impact of digital transformation suggests the development of new professional competencies. In this context, professionals are in a constant learning process to contribute to a sustainable and socially responsible society, leveraging technological advancements (Xu et al., 2021; Žižek et al., 2021). In this perspective, the objective of this work is to map the current themes that permeate the competencies of fashion design professionals through a scoping review.

Contextualization of the Environment

For a brief understanding of the context of professionals in the fashion area, with a focus on their education, we refer to the work of Batt et al. (2021). The authors present a model for the training of healthcare professionals with the patient at its core. Drawing a parallel, we propose a model where the consumer is at the centre. Furthermore, the model by Batt et al. (2021) is structured based on a systemic thinking approach, meaning: (i) it employs an adaptation of Bronfenbrenner's (1979) Ecological Systems Theory[3], with a perspective on potential interactions between individuals and environmental systems (context), which are micro, meso, exo, and macro systems; (ii) it incorporates complexity thinking, with a focus on various heterogeneous elements that influence each other. In this sense, there is a quest for a representation that promotes a better understanding of the relationships between individuals, contexts, and elements, all of which are integral and influential in real-world professional practice.

In line with this, De Macedo (2022) discusses fashion education in the context of the epistemology of complexity, inspired by Morin (2015), where reality is multifaceted, and its fragmentation for didactic purposes tends to weaken its meaning. The challenge of complex thinking lies in "facing the entanglement (the endless inter-retroactions, the solidarity of phenomena among themselves, the haze, uncertainty, contradiction)," integrating the whole in which contemporary reality presents itself (Morin, 2015, p. 14). It deals with incompleteness and uncertainty, while recognizing the relational ties between various

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[2] In the case of this research, a limitation is applied to the subject of clothing.

[3] "A set of nested structures, each within the other, like a set of Russian nesting Dolls" (Bronfenbrenner, 1979, p. 3)

elements. Thus, "complex thinking is directly related to transversality, as it understands that no knowledge is isolated and therefore conceives a [professional] education based on non-disciplinarity" (De Macedo, 2022, p. 298, our translation).

By applying the systemic map of Batt et al. (2021) to fashion design education, we can see Figure 1, in which the consumer subject is at the centre, interacting with professionals in the field and their respective systems.
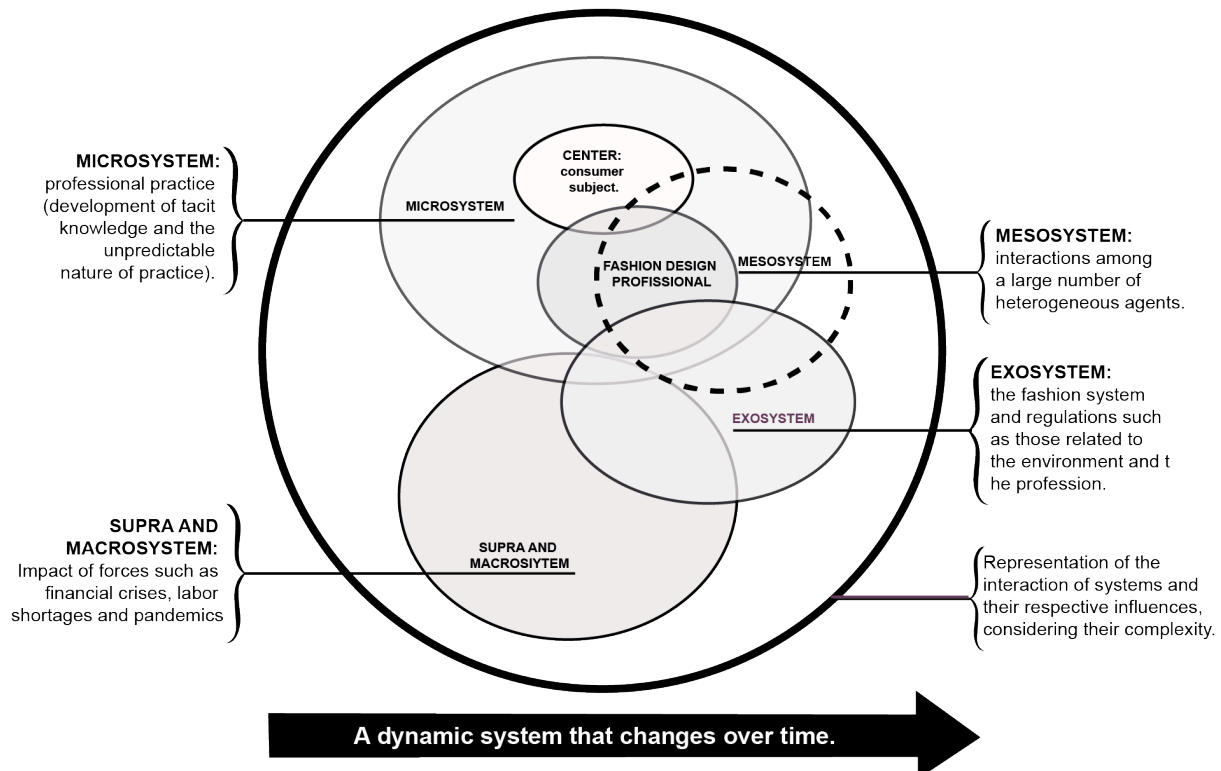

MICROSYSTEM: professional practice (development of tacit knowledge and the unpredictable nature of practice).

MICROSYSTEM

CENTER: consumer subject.

FASHION DESIGN PROFISSIONAL

MESOSYSTEM

MESOSYSTEM: interactions among a large number of heterogeneous agents.

EXOSYSTEM

EXOSYSTEM: the fashion system and regulations such as those related to the environment and t he profession.

SUPRA AND MACROSYSTEM: Impact of forces such as financial crises, labor shortages and pandemics

SUPRA AND MACROSIYTEM

Representation of the interaction of systems and their respective influences, considering their complexity.

A dynamic system that changes over time.

Figure 1: System map related to the fashion area
Source: adapted from Batt *et all.* (2021)

The microsystem is the professional practice, involving the development of tacit knowledge. The competencies required for this professional, the fashion designer, are interconnected and demand the interrelation of diverse knowledge and diverse solutions related to the surrounding context and the consumer subject.

With a broad range of applications, the term "competence" is found in proposals for professional training and development in the business environment and the school system (Zabala & Arnau, 2014). According to Zabala and Arnau (2014, p. 13, our translation), in the school environment, competence is related to "attitudinal, procedural, and conceptual components" that will contribute to the individual in solving problems in different spheres of life. In a more general sense, the concept focuses on the essential skills or attributes necessary for successful work (Boahin & Hofman, 2013). The term represents a challenge to the disconnect between theory and practice, in a movement that aims for a holistic development process for the individual in all its aspects, from the professional, personal, and social dimensions (Zabala & Arnau, 2014).

In the mesosystem, interactions between heterogeneous agents who are part of the fashion system are encompassed. Beyond clothing renewal, fashion carries "the renewal of distinctive

traits among individuals, the renewal of the relationships they establish with each other, and the renewal of the vision they have of themselves" (Bergamo, 2007, p. 24, our translation; Marques, 2014). In this complexity, there is an intrinsic relationship between individual and social experiences. Therefore, the work of a fashion designer is complex both in social and technical terms, requiring critical and reflective thinking in the face of the multitude of possibilities in a liquid society (Lipovetsky, 2020). In the exosystem layer, the system of the field and regulations, such as environmental and profession-related regulations, are considered (Batt et al., 2021).

Finally, it is worth noting that the illustration represents a dynamic system that will certainly undergo changes over time within its context.

Methodological Procedure

In this research, a scoping review methodology is employed, which allows for an analysis of the evidence in a specific research area, synthesizing key concepts, theories, and knowledge gaps (PETERS et al., 2015). To support the process, the PRISMA-P[4] guidelines are used, which were developed by a group of international experts with the aim of improving the accuracy and transparency of reviews (SHAMSEER, 2015).

The search strategy outlined in the research protocol was then utilized, drawing from the following databases: Scopus, Web of Science, ERIC, and SciELO. In Table 1, a summary of the results from each of the selected databases is provided.

SEARCH STRATEGY	SCOPUS	WEB OF SCIENCE	ERIC	SciELO
Search with terms related to "competency-based education," "instructional design," and "fashion"	4	0	0	0
Search with terms related to "competency-based education" and "fashion"	20	9	8	0
Search with terms related to "instructional design" and "fashion"	120	68	231	1

Table 1: Search results in databases

A total of 461 works were found, as shown in the diagram in Figure 2. Using EndNote and Rayan, as well as manual analysis, duplicate works were excluded, resulting in a total of 350 works to be submitted to Phase 2 of the scoping review. This phase involves a double-blind review by two researchers in the field of fashion, using the abstracts of the works as reference, as indicated by Peters *et al*. (2020).

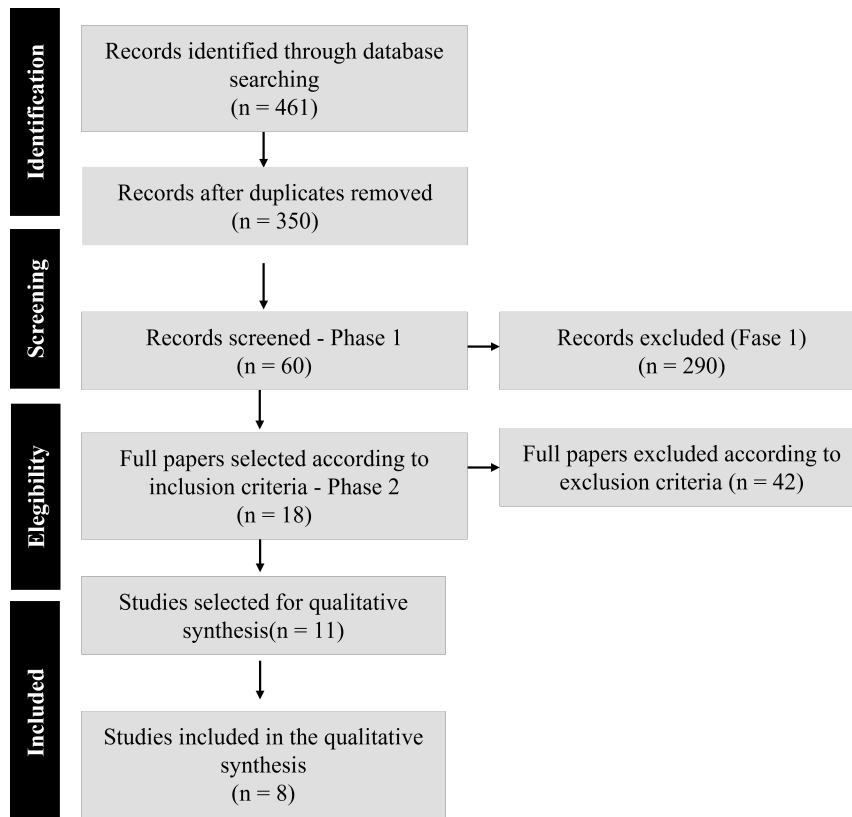[4] The research protocol is published at the link: https://zenodo.org/records/10059132

Figure 2: Literature Search Flow Diagram and Selection Criteria for the Scoping Review
Source: adapted from Moher et al. (2009)

For the double-blind selection process conducted by two researchers, a meeting was held to validate eligibility criteria, as outlined in Table 2.

EXCLUSION CRITERIA	INCLUSION CRITERIA
- Conference proceedings; - Books or handbooks; - Articles published before 2012; - Works specifically focused on Instructional Design courses; - Works specific to faculty development and training; - Analysis of online courses; - Works that address a specific strategy analysis unrelated to the research objectives; - Works not directly related to the field of Design; - Works related to primary and secondary education; - Works unrelated to professional development.	- Journal articles; - Works specifically related to courses in the field of Fashion Design; - Articles proposing competencies for professionals in the field, including both general competencies and specific technical competencies in the field; - Suggestions related to curriculum development for the field, as well as personalization models; - Articles from databases limited to the last 10 years (2012 to 2022).

Table 2: Exclusion and inclusion criteria

In case of difficulty reaching a consensus on work selection, a third researcher was brought in for tie breaking. The Kappa coefficient was applied to measure agreement between the two researchers who participated in Phases 1 and 2 of the selection process. Regarding the analysed variables, the Kappa value between the examiners was 0.646, demonstrating substantial agreement.

After a meeting to analyse articles with conflicting decisions, 60 papers were selected and advanced to Phase 2 of the scoping review, which involves reading the full texts. As a result, 18 works from the field of fashion were selected, and a critical analysis of individual sources of evidence was conducted using the CASP checklist (Critical Appraisal Skills Programme), resulting in a total of 11 selected works.

The synthesis was performed through qualitative analysis, specifically thematic analysis, as presented in the theoretical framework chapter. The thematic analysis process consists of the following steps:
1) Familiarization with data: Transcribing and reviewing the data, noting initial ideas during the process.
2) Generating initial codes: Systematically coding interesting aspects of the data throughout the dataset.
3) Searching for themes: Identifying potential themes by grouping codes that are related.
4) Reviewing themes: Ensuring that themes work in relation to the extracts and the dataset, creating a thematic map.
5) Defining and naming themes: Refining the details of each theme, providing clear definitions and names.
6) Producing the report: Offering vivid examples, conducting a final analysis of selected extracts in relation to the research question and literature, and presenting the scientific account of the analysis (De Souza, 2019, pt. 56, our translation).

Using the software, Atlas TI, a thematic analysis of the scoping review material was conducted based on these six steps. The following section delves deeper into the theoretical framework through a scoping review that relates the constructs of fashion design and competency development, to provide an updated overview of the subject.

A Closer Look at the Competencies of the Fashion Designer

From the analysis of the selected works for the scoping review, the presentation of the defined themes follows with an introduction to employability and digital skills, followed by the themes: 1) entrepreneurship; 2) sustainability; 3) research, development, and production processes. It is worth noting that these themes are intertwined in both the teaching and learning process and the professional life of the fashion designer, indicating a trend towards interdisciplinary or transdisciplinary approaches (Boahin & Hofman, 2013).

The development of competencies, skills, and attitudes related to employability provides individuals with flexibility and adaptability to meet the constant changes in the world of work (Boahin & Hofman, 2013). Higher education curricula have increasingly focused on the development of competencies, especially professional competencies (Hodges et al., 2015), offering a possible solution to bridge the gap between graduates' qualifications and the demands of the workforce (Muzenda & Duku, 2014). Competencies in this context include proactivity, creativity, problem-solving, teamwork, interpersonal, social and critical thinking, communication, and networking (Boahin & Hofman, 2013). "The increased interest in

employability skills reflects the development of human capital to meet the demands of a knowledge-based economy" (Boahin & Hofman, 2013, p. 3).

In this regard, the relationship between educational institutions, students, and external sectors is an important collaboration opportunity for building relevant curricula for a diverse society and preparing professionals for the world of work. However, in many cases, there seems to be insufficient integration between educational institutions and external sectors when it comes to focusing on competency development (Muzenda & Duku, 2014).

Yamada & Otchia (2021) highlight the perceptions of teachers and students in Ethiopia regarding technical skills for clothing production and workplace-related attitudes. Both groups - teachers and students - emphasize the importance of skills specifically related to the fashion field, such as body measurement, pattern making, fabric preparation, and sewing. However, these technical skills in the fashion field were more highly valued by the participating teaching staff, which the authors interpret as a tendency for the group to prepare students to work as collaborators in the industry. On the other hand, variables related to entrepreneurship, leadership, and work plans received more emphasis from students, indicating their interest in starting their own businesses (Yamada & Otchia, 2021).

Among the competencies that contribute to employability, in addition to entrepreneurship, are digital competencies. In the field of fashion design, digital technologies contribute to process improvement with software for creation, modelling, support for the production process, and virtual reality environments (Lee, 2022).

Building on the themes of employability and digital competencies, there are examples of strategies for their development, including student-centred learning, problem-based learning, reflective learning, work experience (internships), virtual reality environments, and collaborative learning approaches. The focus is on making the teaching and learning process experiential, moving away from the traditional transmission of knowledge from the teacher to the student. The following section explores the theme of entrepreneurship.

Entrepreneurship

Hodges et al. (2015) emphasize the large number of small businesses in the textile and clothing sector in the United States and the possibility for graduates to work in this sector or partner with these businesses through their ventures. Many companies in this sector have various departments located in different countries or even opt for outsourcing certain processes. Therefore, future fashion design professionals need to understand the challenges of a global supply chain (Hodges et al., 2015).

Entrepreneurship also intersects with other themes such as sustainability and production processes. Since 2016, the 2030 Agenda, which includes the United Nations' Sustainable Development Goals (SDGs), has been adopted by 193 countries. Among the 17 SDGs is Goal 12: Sustainable production and consumption, which must integrate the management and strategies of the fashion sector, whether in an educational, organizational, or individual context (BCSD PortugaL, 2022). The Fashion Revolution movement has been at the forefront of bringing these SDGs and related topics into industry and academia for more than a decade, aiming to promote "a global fashion industry that conserves and restores the environment and values people over growth and profit" (Vision & Aims, 2013, p. 1).

In line with this, Hall and Velez-Colby (2018) bring the circular economy together with entrepreneurship in the fashion industry. Students are tasked with creating a business plan from a sustainability perspective, considering possible social and environmental impacts. This activity invites companies and organizations aligned with this theme to participate and places the student as the protagonist (Hall & Velez-Colby, 2018).

The competencies required for success in entrepreneurship include social, financial, communication, problem-solving, self-management, creative thinking, innovation, and cultural awareness (Hodges et al., 2015). As mentioned by students interviewed in Hodges et al.'s research (2015), networking plays a significant role in the success of entrepreneurs by providing support, encouragement, and opportunities. Networking can also develop through global experiences, such as exchanges or other activities that allow students to gain insights into different cultures and knowledge beyond their geographical boundaries (Abner et al., 2019; Hodges et al., 2015). Hodges et al. (2015) emphasize the importance of fostering entrepreneurial knowledge in small textile and clothing businesses from a global perspective.

There is a considerable variety of teaching approaches for entrepreneurship, including real-world examples, active learning, and student-centred learning that allows students to take a more proactive role in their development (Hodges et al., 2015; Mawonedzo et al., 2021; Yamada & Otchia, 2021). One example in this field is the Junior Enterprises, which connect theory and practice of entrepreneurship by executing projects for real clients under faculty supervision, enabling the development of not only technical skills but also soft skills, including communication, people management, problem-solving, and resource management (Mawonedzo et al., 2021).

Another teaching strategy used in fashion programs is internships with companies, which provides students with exposure to various stages of the production process, from design to clothing production. However, research among students conducted by Mawonedzo et al. (2021) revealed that internships do not necessarily expose students to entrepreneurship and management practices. As introduced in this section, the discussion proceeds to the theme of sustainability.

Sustainability

The concept of the circular economy is gaining traction as it provides a connective and interdisciplinary framework for addressing ethical and sustainable standards in the fashion industry (Hall & Velez-Colby, 2018). The challenge lies both in the reengineering of how products are designed and in the focus on building and sharing knowledge to put circular economic principles into practice (Hall & Velez-Colby, 2018).

Abner, Baytar e Kreiner (2019) introduce Education for Sustainable Development in the textile and clothing sector, using a student-centred approach, making students agents of knowledge creation. The study describes an experience where students are treated as consumers, aiming to raise awareness not only to influence their actions as professionals in the field but also to encourage them to take responsibility for preserving natural resources (Abner et al., 2019). Addressing sustainable processes in textile and clothing courses equips students with a toolkit to reflect on principles, tools, and strategies to be applied in their field creatively and sustainably, meeting the demands of both consumers and businesses (Rana & Ha-Brookshire, 2019).

Knowledge about sustainability is interdisciplinary, stimulating creative and critical thinking, and is supported by interpersonal skills and elements such as people and resource management, communication, and collaboration (Rana & Ha-Brookshire, 2019). Now, let's move on to the theme of research and development.

Research, Development, and Production Processes

For fashion professionals, knowledge of the market and, most importantly, an understanding of the contemporary diversity in consumer behaviour are essential. Consumers seek a good experience with clothing products (Christel, 2016). An example of this is presented by Christel (2016) in the context of the plus-size clothing segment. In this segment, individuals' body measurements have particularities that lend themselves to customization of garment patterns. The author expands the scope of the modelling challenge to other segments, such as the elderly, pregnant women, children, and people with disabilities.

In this context, data collection activities and practical project execution can be conducted in fashion programs, training students to have a keen eye for consumer diversity, as well as research trends and a global understanding of the fashion supply chain (Christel, 2016; Muzenda & Duku, 2014).

Within the production processes, technical sewing knowledge is a critical component. Ramasamy e Pilz (2019) introduce an alternative employment opportunity for agricultural communities in India. The authors present a model of sewing professional competence involving four main components: cognitive, functional, behavioural, and ethical. "Cognitive competence includes underlying theory, conceptual understanding, and tacit knowledge acquired through experience or the execution of specific tasks" (Ramasamy & Pilz, 2019, pp. 10–12).

The functional component is related to specific professional tasks, while the behavioural component refers to personal attributes and decision-making capacity within the work context. The ethical component pertains to professional and personal values related to the work context (Ramasamy & Pilz, 2019). The profession involves various activities, such as measuring, preparing, cutting clothing pieces, and making patterns according to each customer's body measurements (Ramasamy & Pilz, 2019, p. 14).

Sewing is just one element of the textile and clothing industry's supply chain. As mentioned earlier, there is a global dimension that requires innovative business processes and solutions to address the inherent challenges. This also necessitates professionals with intercultural competencies (Hodges et al., 2015).

Discussion

The sections presented expose the fashion system associated with the values of ephemerality and individualism, where the central focus is the consumer (Lipovetsky, 2009; Sant'Anna, 2009). In this scenario, the acceleration of trend launches and the seduction of the new constitute a "culture of lightness" that pervades all sectors, including fashion (Lipovetsky, 2016). The convergence of these factors intensifies pressures for obsolescence and disposal in the fashion industry, which already has significant social and environmental impacts.

In this sense, new competencies are required for fashion designers to guide aesthetic choices and means of production towards sustainability, diversity respect, and the valorisation of local production. In other words, it is necessary to combine the transformative potential of technology with a humanistic and ethical education.

The development of competencies for fashion designers is suggested to start from a systemic perspective, based on the adaptation proposed in the work of Batt et al. (2021), which is grounded in Bronfenbrenner's Ecological Systems Theory (1979). This approach involves considering the complex interactions between various actors involved in the education and professional practice of fashion designers, including students, faculty, educational institutions, employers, suppliers, consumers, and the broader socio-economic context. In this sense, the view of complexity advocated by Morin (2015) and explored by De Macedo (2022) is applicable to the field of fashion, demanding interdisciplinary and transdisciplinary solutions.

In addition to the mastery of specific technical skills such as pattern making, sewing, and drawing, authors highlight the need for employability competencies. This includes teamwork, communication, solving complex problems, self-management, and lifelong learning, as emphasized by Boahin and Hofman (2013), Muzenda and Duku (2014), and Yamada and Otchia (2021).

Entrepreneurship is also mentioned, encompassing creativity, strategic vision, project management, marketing, finance, and intercultural competencies, given the globalized value chains. The works of Hodges et al. (2020), Mawonedzo et al. (2021) and Hall and Velez-Colby (2018) emphasize the importance of involving students in real projects, junior enterprises, and international exchanges for practical professional experience.

Socio-environmental sustainability is another cross-cutting theme that should guide all design choices in production processes, considering the life cycle of products. Abner, Baytar, and Kreiner (2019), and Rana and Ha-Brookshire (2019) emphasize visions such as the circular economy and Sustainable Development Goals (SDGs), complemented by the *Fashion Revolution Movement* to contribute to a more ethical and regenerative sector.

Market research and trend analysis are crucial for understanding the diversity of contemporary consumers, including gender, age, body type, and special needs, as exposed by Christel (2016). This requires data collection and interpretation skills for user-centred design.

The text also highlights the importance of mastering traditional production processes and emerging technologies such as virtual modeling, 3D printing, and virtual reality simulations, as explained by Ramasamy and Pilz (2019). Finally, digital competencies involve not only the use of industry-specific software but also a critical relationship with technologies like artificial intelligence, respecting ethical concerns and human values.

Figure 3 is derived from the information that composed the scope review report presented and is showed in a network format that deviates from a linear and progressive structure. In this sense, competencies require an interdisciplinary or even transdisciplinary learning process that approaches the reality of a fashion designer in the working world.
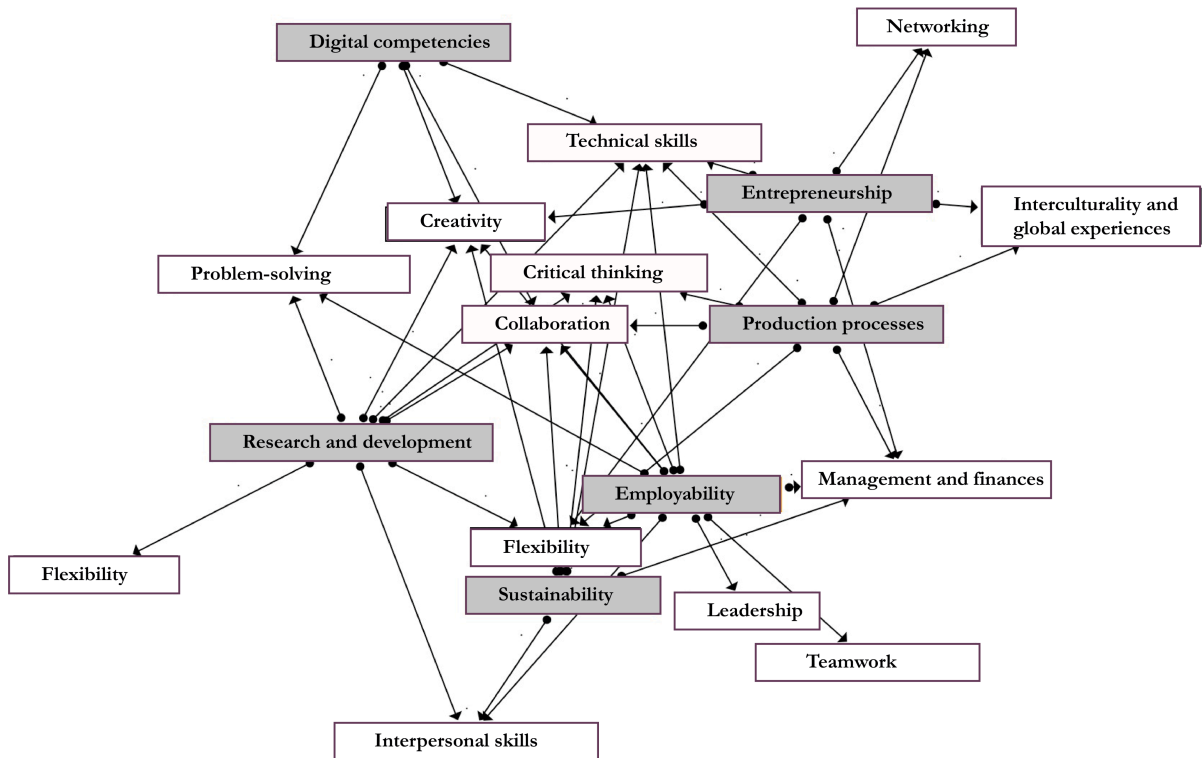
Figure 3: Developments related to the competencies of future fashion professionals

In summary, the text provides an updated overview of the competencies required for fashion designers, considering a systemic, integrated, and ethical perspective.

Conclusions

This scope review mapped the main themes and competencies required of fashion designers in contemporary times. It revealed the need for a comprehensive education that develops specific technical skills alongside ethical, reflective, and intercultural competencies.

It also emphasized the importance of interdisciplinary and transdisciplinary approaches in the curriculum to reflect the complexity and dynamism of the working world. In this scenario of acceleration and volatility, it is crucial for designers to cultivate creativity and innovation with a purpose, guiding aesthetic choices and means of production toward sustainability, the appreciation of human diversity, and respect for local cultures. Their education should enable them to consciously harness the transformative potential of digital technology without sacrificing critical reflection and a humanistic perspective.

As described by Bauman (2001) as "liquid," contemporary society questions previously unquestioned beliefs, including the educational system. Among its challenges are the allure of knowledge for immediate use, contrasting with a "solid and structured education," and the unpredictability of events that further reinforce the questioning of inflexible study programs. Thus, there is a convergence towards professional education that supports lifelong development, personalized educational paths, and flexibility in designing curricula that adapt to individual and socio-economic needs.

The study can further support in-depth reflections on curricula and educational approaches that encompass these multiple dimensions. Considering eligibility criteria, for an expanded

study on the topic, it is suggested to conduct a literature review that goes beyond scientific articles, including institutional documents from fashion design programs, theses, dissertations in the field, or grey literature.

Acknowledgements

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