Enhancing the Industry Readiness of Fashion Design Graduates: The Role of Universities in Skill Development in Asia (A Literature Review)

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*corresponding author Abstract: Fashion designers play a crucial role in the fashion industry by creating designs that meet market demands. There are ⊠zsa.zsa.evangeline.412742many skills that need to be learned to become a fashion designer, 2023@pasca.unair.ac.id1 which can be acquired through higher education. This study uses a literature review method to explore how universities prepare aspiring fashion designers for the workforce, particularly in Asia. The study shows that, in Asia, especially in China, fashion design graduates are equipped with both soft and hard skill curricula from universities and have successfully become fashion designers needed by the industry. However, in other countries such as Pakistan, the preparation of graduates is not yet as advanced as in China. The skills and curriculum taught by universities are key factors in shaping a fashion designer's readiness to meet market and industry demands.

Keywords: Fashion designer, Fashion Education, Asia, University Role, Higher Education

INTRODUCTION

The fashion industry in Asia has been growing rapidly for several decades and continues to have a wide-reaching influence on the world. (Ho, 2023). This expansion has led to a high demand for fashion in Asia. Fashion designers in Asia are continuously required to meet global demand by combining design with sustainability as their key value. (Alemi, 2024)

Fashion designers have become a primary profession in the fashion industry, requiring creativity and natural talent to design and create clothing. (Lee et al., 2018). The clothing design process carried out by designers in the fashion industry involves various interconnected essential aspects, known as the supply chain. Fashion supply chain process consist of: (1) design & material, (2) warehouse, (3) production, (4) distribution, dan (5) reverse logistics

(Bottani & Casella, 2020). The concept and design process serves as the first, opening, and most crucial stage in the supply chain cycle.

Fashion designers are required to create, design, and develop fashion concepts to be sold in the market. They transform two-dimensional designs into three-dimensional garments through their creativity (Tan & Chon, 2016). Fashion designers must have the ability to design clothing that meets market demands, not just based on their personal preferences.

The ability to read market trends and creatively apply them to new designs is a lifelong challenge for fashion designers. Beyond just designing, they must also understand the details of the garments they create and the production techniques to ensure the final product aligns with the original concept. (Barata & Miguel, 2023). This job requires fashion designers to have various skills and in-depth knowledge related to the field they specialize in to create fashion works that are in demand by the market and society. An outstanding fashion designer's skills must be balanced with creative abilities to face various challenges that will arise in the workforce industry. Creativity, which is a key part of soft skills, can maximize the potential of hard skills, especially in large-scale industries like fashion. (Creigh-Tyte, 2005).

Higher Education teach a wide range of knowledge and conceptual methods to prepare designers for the learning process. These academic programs not only provide technical skills but also encourage critical thinking, creativity, and an understanding of broader trends, helping designers to adapt and innovate in the ever-evolving fashion industry (Kaur Majithia, 2017). Universities are also seen as capable of providing connections and opening new opportunities for aspiring designers. Formal education, especially at the undergraduate level, plays a crucial role in building adaptive attitudes, mental resilience, creativity, skills, and insights needed to compete in the fast-paced fashion industry. This foundation helps students not only excel in their craft but also navigate the industry's challenges and seize emerging trends and opportunities. (Chida & Brown, 2011).

RESEARCH METHOD

This research method uses a qualitative approach through the literature review and indepth analysis of the role of universities in creating fashion design graduates with skills that meet the expectations of the industry, based on previous research. The study will identify findings from relevant literature with the aim of determining the role of higher education institutions in shaping fashion design graduates with the skills desired by the industry. The analysis results are expected to provide broader insights for the public and universities with fashion design programs in preparing their graduates for the workforce, particularly in Asia.

LITERATURE REVIEW

FASHION DESIGNER SKILL

Designers need a variety of skills that are essential for a designer. Taverner et al. (2021) dan Lee et al. (2018) highlight several key competencies that designers, particularly those working in manufacturing fields like fashion, are expected to possess.

1. Design skill

Designing skills are fundamental for designers. The process of creating and shaping concepts based on market desires is crucial and requires strong design abilities. Designing skills involve more than just making a product visually appealing; they also include ensuring that society can accept and benefit from the product created. The ability to design has become deeply ingrained as one of the essential skills that fashion designers must possess. (Leclerc & Horan, 2018).

2. Green skill

Sustainability has become a key issue continuously discussed in the fashion industry. In the 21st century, the ability to understand and incorporate sustainability into fashion has become an essential skill for fashion designers. This includes considering environmental impacts, ethical production methods, and creating designs that are both socially and environmentally responsible. Fashion designers who embrace sustainability are better equipped to respond to consumer demand for eco-friendly products and contribute to the future of the industry. (Basdekidou, 2021). Sustainable Fashion Design Specification (SDFS) has become an important point for evaluating how well students can apply sustainability principles in their clothing designs. The waste that continues to pollute the Earth presents a new challenge for fashion designers. The ability to manage sustainability has become a sought-after skill by both society and the industry to design clothing while considering ethical practices. Green skills are also expected to help designers achieve global sustainability goals within the framework of the SDGs. These green skills can be a significant advantage for a designer, particularly when creating fashion that aligns with the growing public awareness of health and environmental sustainability.

3. Creativity Skill

Creativity is one of the most prominent and essential soft skills for a designer. It serves as the core point for all management within the fashion field. Studies on creativity in fashion designers have continued to evolve over the decades, highlighting its significance in developing innovative designs, adapting to market trends, and overcoming industry challenges. Creativity allows designers to think outside the box, experiment with new ideas, and differentiate their work in a competitive industry. As fashion continues to change, the role of creativity in shaping unique, impactful designs remains crucial.(Barata & Miguel, 2023). Creativity becomes a valuable asset in tackling problems that may arise within the fashion industry. The ability to creatively combine textiles and designs while working within a limited budget is a skill that can greatly facilitate a fashion designer's workflow. This skill allows designers to innovate and find efficient, cost-effective solutions without compromising the quality or aesthetic of their work. By using creativity, designers can transform challenges into opportunities, whether it's working with sustainable materials, optimizing production processes, or meeting market demands.

4. Digital Skill

The ever-evolving world of design and fashion requires digital skills and an understanding of how to leverage technology throughout its processes. The increasing use of software in fashion product design, especially with the emergence of Fashion 4.0, demands digitalization. Fashion designers must adapt to this digital transformation by mastering digital tools to stay competitive, innovate, and meet the demands of the market. (Särmäkari, 2023). Digitalization has brought significant changes to the fashion industry and can help drive it toward waste reduction, such as through the creation of digital patterns and clothing samples. By using software to design patterns and prototypes, designers can reduce the need for physical materials, minimize fabric waste, and speed up the production process (Choi, 2022). Unfortunately research conducted by Postlethwaite (2022) shows that many graduates from fashion schools still have limited knowledge of digital tools and technology, making it difficult for them to keep up with the developments required by the fashion industry, which is currently undergoing digitalization. As digitalization becomes more integral to the industry, it's crucial for educational programs to incorporate technology and digital tools into their curriculum to better prepare future fashion designers.

COMPETENCIES SKILL AT UNIVERSITIES

Universities prepare students by teaching a variety of skills to help them achieve the desired competency indicators for graduates. Through academic programs, students are equipped with both theoretical knowledge and practical skills, enabling them to meet industry demands and

excel in their careers. This comprehensive approach ensures that graduates possess the necessary capabilities, such as technical expertise, creativity, critical thinking, and adaptability, to succeed in their respective fields. (Lamberti et al., 2023a; Loukkola et al., 2020). Here are the competencies provided and expected to be possessed by university graduates:

1. Soft Skill

Soft skills are essential abilities that are part of university education. Soft skills encompass various aspects, such as communication skills, teamwork, and the ability to think creatively and innovatively. These skills are crucial for graduates to navigate the professional world, work effectively with others, and adapt to changing environments. Developing strong soft skills helps individuals build relationships, solve problems, and contribute positively to their organizations and communities (Noah & Abdul Aziz, 2020). Fernandez-Sanz et al. (2017) stated that an individual's soft skills consist of innovation creation, creative thinking, and the ability to work flexibly in teams. Soft skills also assist individuals in problem-solving, collaborating, and communicating to achieve goals more effectively. This is what becomes a distinguishing value for university graduates.

Creativity has become a core value desired from university graduates, especially in the 21st century. (Li, 2023). Creativity has a significant impact on various aspects, particularly in creating, designing, and finding solutions to problems, especially in the real-world work environment or industry. The industry's need for creative individuals drives universities to continuously foster creative and innovative thinking skills. By nurturing these abilities, higher education institutions prepare graduates to meet the demands of a competitive and ever-changing job market, where creativity is essential for addressing challenges, driving innovation, and contributing to the advancement of industries(Chacón-López & Maeso-Broncano, 2023).

Universities that offer programs involving creativity, such as design, certainly place a strong emphasis on creative thinking and problem-solving (Kreitler & Casakin, 2009). Universitas menyadari bahwa penting sekali kemampuan berpikir kreatif menjadi kekuatan utama bagi para pelaku desain dan seni (Qian et al., 2022). The research conducted by Rodgers & Jones (2017) howed a study related to the understanding of creativity at the university level. However, in the cases examined, the theoretical understanding of creativity was still not deeply explored by both faculty and students. Similaryly, the study by Jones et al. (2014) revealed that the subject area at the higher education level allows for a broader interpretation of innovation and creativity within each discipline. These findings suggest that while creativity is valued, its

theoretical exploration and application across various fields could be more thoroughly integrated into academic programs.

Universities play a significant role in nurturing creative thinking through education. The research conducted by Wong & Siu (2012) examined how universities provide effective methods for teaching creativity to create good designs, with a focus on design students. This is because, essentially, creative thinking skills are not something that can be easily developed. Creative thinking skills also become an important knowledge and asset for graduates in facing the workforce

The research conducted on internship designers supports this by stating that soft skills, such as work ethics and attitude, are highly valued by companies and are useful in completing tasks. (Gale et al., 2017). Soft skills are abilities that are closely linked to an individual's job readiness and career success, especially for university graduates (Ingsih & Stikubank, 2023) It even becomes a crucial factor in securing a high salary. (Lamberti et al., 2023b). Succi & Canovi (2020) mention that communication skills, commitment to work, and teamwork are three key skills that enhance an individual's quality in the workforce.

2. Hard Skill

Hard skills are practical and technical skills that an individual possesses to complete a task. (Montandon et al., 2021). The hard skills possessed by each individual vary according to their abilities and interests (Cahyadiana, 2020). Unlike soft skills, which are more general in nature, hard skills are more measurable in terms of value and numbers.

The research conducted by Abdul (2018) shows that hard skills have a positive influence on an individual's competence in the workforce. This is also supported by the statement from Souza et al. (2024) who mention that many workers struggle to find jobs due to a lack of hard skill competence. Companies continue to strive to improve productivity by hiring individuals with strong hard skill qualifications. (Cahyono et al., 2022).

Hard skills are one of the key aspects sought by employers and serve as a benchmark in university assessments before graduates enter the real workforce. Universities play a significant role in developing an individual's hard skills to unlock greater potential in facing the industry.

The era of technology continuously demands individuals to keep developing their skill sets (Thames & Schaefer, 2017). Universities strive to equip their graduates with hard skills as an added value to meet the needs of the industry. This is further supported by the research conducted by Doherty & Stephens, (2023), which shows the challenges universities face in developing their graduates' capabilities to keep up with the industry's fluctuations and demands.

In fields such as design and engineering, hard skills are becoming increasingly essential due to the continuously evolving technology.

DISCUSSION

Universities are able to provide competencies through educational resources that prepare the skills of designers, especially fashion designers. Fashion designers with various competencies required by the industry can be shaped through higher education. The demand for a diverse set of competencies in fashion design graduates encourages universities to continuously improve the quality of their graduates year by year, preparing them with both soft skills and hard skills.

Higher education institutions not only prepare designers technically and practically through disciplines such as sewing techniques, pattern making, and measurements, but also focus on educating designers to think creatively and innovatively to solve problems, as well as to communicate and collaborate effectively with teams. The research by Gupta et al. (2025) states that design and creativity skills, technical expertise, business and marketing skills, research and cultural awareness, as well as communication and soft skills, are considered key competencies that are important for all stakeholders in higher fashion education.

According to Yan et al. (2022), in cases in Asia, workers in the fashion industry tend to have lower educational status because the fashion field is often viewed as an area that only requires labor and experience. Additionally, the quality of higher fashion education, particularly in South Asia, is still considered to be low. The perception of applied education, such as fashion, is still generally negative compared to theoretical-based education. However, higher education institutions, as formal education providers focusing on fashion design, can offer more systematic education and foster creative thinking as a form of work readiness. (Gopura et al., 2019).

Fashion education continues to evolve and undergo changes. Universities need to prepare students to enter the workforce while also providing understanding and empowerment to face sustainability challenges in the era of globalization (Scott et al., 2024). The research conducted by Hameed & Umer, (2017) shows differences in fashion education at universities in the UK and Pakistan, as a representative of Asia. The study reveals that fashion education in Pakistan still lacks the necessary technology facilities that can be applied in the global industry. The research also found that graduates from fashion universities in Pakistan are less prepared for the workforce compared to those from the UK. However, in larger Asian countries like China, universities focus significantly on work readiness, both in terms of soft skills and technical skills for fashion graduates, although they are less focused on preparing students for

entrepreneurship. (Shi et al., 2012). The research by Shen & Sethi (2021) shows that some fashion design graduates from higher education institutions in Asia, such as China, India, Bangladesh, and Pakistan, possess good skills as fashion designers. However, they lack awareness of sustainability because they never studied this topic during their education. Yet, sustainability awareness is a crucial skill that designers need in this era.

The development of the industry driven by technology is pushing designers' knowledge of technology, particularly data science, which has recently become an essential element for designers. Data science is part of the digital sciences that are now needed to provide recommendations and simplify the work of fashion designers in analyzing trends and diverse market demands (Muthmainnah & Voutama, 2023). Unfortunately, according to research by Merryman & Lu, (2021) through a case study in the United States, many universities have yet to implement curricula and education related to data science knowledge for fashion designers. Data science is a relatively new curriculum in the field of education and higher education, not only in the United States but also in various universities around the world, including Asia, even though this skill is increasingly needed by designers.

CONCLUSION

Based on the discussion and literature analysis, it can be concluded that formal fashion education in higher education institutions contributes to job readiness and skill fulfillment for aspiring fashion designers. Fashion universities in Asia have started to improve their standards by adjusting curricula and providing both hard and soft skills that align with the global industry. However, they have not fully developed to meet the industry's demands, especially with the ongoing technological advancements. Graduates from fashion universities in Asia, particularly in China, have shown good preparedness to become successful designers, though in some other countries like Pakistan, they are not as well-prepared as those from China. It is expected that higher education institutions in Asia will enhance their curricula to better align with the evolving fashion industry needs and market demands.

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