textiles

MDPI

Article

Sustainable Innovation in Fashion Enterprises: The Interplay of Imitation, Creativity, and Managerial Skills

Panagiotis Tsolakidis, Michail Karypidis * and Evridiki Papachristou

Department of Creative Design and Clothing, Faculty of Design Sciences, International Hellenic University, 3rd km Kilkis-Metalliko, 61100 Kilkis, Greece; ptsolakidis@ihu.gr (P.T.); evridikipapa@ihu.gr (E.P.)
* Correspondence: mkarypidis@ihu.gr

Abstract

This study investigates the association between specific strategies and types of imitation, Managerial Skills (MS), and Creativity (CR) on the development of Sustainable Innovation (SINV) within fashion enterprises. Focusing on enterprises and startups in the apparel sector, the research explores how these factors contribute to the advancement of innovative and sustainable business practices. Emphasis is placed on the role of creative imitation strategies, specifically Outcome-Based Imitation (OBI) and Trait-Based Imitation (TBI), in fostering SINV by adapting successful existing practices. Furthermore, the study examines how CR and MS facilitate the design and implementation of innovative solutions that create enduring value for organisations. Data were collected through a structured questionnaire distributed to 287 managerial executives from fashion enterprises and startups operating in Greece, of whom 175 were analysed. After the measurement model had been assessed with confirmatory factor analysis, the hypotheses were tested with a two-step hierarchical multiple regression using heteroscedasticity-consistent standard errors and bootstrap confidence intervals. OBI, TBI and CR were positively associated with SINV; the association of MS was also positive but not robust to heteroscedasticity-consistent standard errors. The four predictors made comparable contributions to the explained variance, and associations were found mainly for the economic and social dimensions of SINV. These findings highlight the relevance of imitation and creativity to sustainable innovation in fashion enterprises and suggest that managers should consider both approaches when developing innovation strategies.

Keywords: sustainable innovation; imitation; outcome-based imitation; trait-based imitation; managerial skills; creativity; fashion industry; startups

Check for updates

Academic Editor: Jintu Fan

Received: 9 September 2026
Revised: 31 October 2026
Accepted: 9 November 2026
Published: 23 November 2026

Copyright: © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.

1. Introduction

The fashion and apparel sectors constitute powerful vehicles for creativity and innovation [1], significantly contributing to global trade and retail, and establishing themselves as key players within entrepreneurship. Fashion is among the most vital industries, contributing a considerable share to the global economy [2]. According to estimates from McKinsey [3], if the fashion industry were compared to national economies in terms of Gross Domestic Product (GDP), it would rank as the world's seventh-largest economy. To provide a precise framework for this study, SINV must be defined. SINV refers to the development of new products, services, technologies, and business models that promote long-term economic growth, social progress, and environmental protection [4,5]. Traditionally, SINV has focused on reducing environmental impact by creating eco-friendly

products, adopting sustainable production processes, and promoting responsible consumption [6]. However, the contemporary literature extends this concept, emphasising the integration of digital technologies, the development of new service forms, such as digital fashion and fashion-as-a-service, and the implementation of circular business models to strengthen business resilience and long-term sustainability [7]. Therefore, SINV extends beyond environmental initiatives to encompass every strategy that generates responsible and enduring value. The fashion industry generates annual revenues exceeding $2 trillion worldwide [8,9], with China leading as the largest exporter of textiles and garments and the European Union as the largest importer [10,11]. These dynamics underline the pervasive role of innovation across all productive activities within the fashion sector. Innovation is mainly observed in both product development and production methods [12], with fashion enterprises opting for either radical innovation, which entails the creative destruction and complete replacement of old ideas, or incremental innovation, in which existing concepts evolve into improved forms [13]. Moreover, the dynamic environment of fashion markets, along with emerging market conditions, offers fertile ground for the application of SINV. According to Brydges et al. [14], the accelerated global production of garments has significantly influenced product design, manufacturing, and distribution processes. The rise and consolidation of fast fashion, coupled with the increasing casualisation of dress codes both socially and professionally, have profoundly impacted the industry. In parallel, designers' creativity and the emergence of new trends have led to the adoption of innovative sustainable practices, such as material reuse, fashion-as-a-service, and digital fashion.

Simultaneously, shifts in consumer values, market segmentation based on economic, social, and cultural parameters, and the establishment of global trend standards have led to the widespread adoption of imitation strategies among fashion enterprises [15,16]. In the fashion industry, imitation plays a dual role: while it often fosters redundancy, it also promotes innovation and variety [17,18]. While the copying of fashion designs and trends raises concerns over intellectual property and the sustainability of fast-fashion practices, imitation may also provide a basis for innovation. By drawing on successful practices and established industry models, fashion enterprises can adapt existing knowledge to their own needs and develop more sustainable products, processes, and business models.

Beyond innovation and imitation, CR remains a key driver. The link between CR and innovation in emerging markets is evident across products, production processes, and new technologies [19]. CR creates additional value by addressing both evolving consumer needs and shifting trends in the fashion environment [20,21]. As with all innovation-driven enterprises, managerial skills (MS) are crucial for fashion businesses.

MS are manifested through decisions and actions that influence organisational outcomes [22]. Changes in the contemporary business environment, technological advancements, and increasing market complexity have rendered MS indispensable for cultivating favourable conditions for innovation [23]. Previous research has addressed imitation in fashion innovation [17], creativity in fashion design [21], and sustainable business model development in the fashion industry [24,25]. Tsolakidis et al. [26] examined the effects of imitation strategies and managerial skills on entrepreneurial innovation. However, the contribution of distinct imitation strategies, creativity, and managerial skills to sustainable innovation in fashion enterprises remains insufficiently explored. The present study addresses this gap by extending the framework of Tsolakidis et al. [26] to incorporate creativity as an additional factor and to focus on sustainable rather than entrepreneurial innovation.

The Greek fashion and apparel sector provides a relevant setting for this investigation, particularly in view of initiatives supporting sustainable fashion practices [27]. The sector is particularly suitable for examining imitation as a driver of sustainable innovation, since fashion enterprises routinely draw on existing designs and trends while seeking to

differentiate their products and practices. For enterprises operating in this context, the need to adapt existing practices while pursuing innovation and sustainability makes the relationships between imitation strategies, CR, MS, and SINV particularly relevant.

Within this context, sustainability extends beyond environmental parameters, encompassing fashion enterprises' strategic ability to innovate flexibly by improving and adapting business models. CR, whether expressed autonomously or through the creative imitation of existing results and traits, can serve as a driving force for SINV. Concurrently, MS ensure the effective implementation and long-term viability of innovations, including digital fashion, material reuse, and innovative apparel services.

1.1. Theoretical Background

1.1.1. Sustainable Innovation in Fashion Enterprises

The concept of SINV and its application within enterprises extends beyond generating ideas aimed solely at reducing environmental impacts. It can also be understood as the pursuit of improvements in products and processes [28]. More broadly, SINV represents a holistic approach that integrates new ideas, practices, and processes across the enterprise's environmental, economic, and social dimensions to create long-term value and foster growth opportunities [29,30].

The fashion and apparel industry is fundamentally structured around a strong entrepreneurial and creative framework that fosters opportunities for innovation. With its inherently creative orientation, the industry encourages the generation of new ideas and practices that can support the development of innovative business models. Within this framework, SINV has the potential to generate a wide range of impacts, including improvements in product sustainability, responsible supply chain management, design practices, entrepreneurial initiatives, and active consumer participation in the marketplace [24]. At the same time, as Bertola et al. [31] note, socio-cultural transformations across markets play a decisive role in shaping fashion design and, more broadly, in guiding the industry's direction, often giving rise to alternative forms of innovation. According to Casciani et al. [32], the fashion sector has undergone a significant digital transformation in recent years, reshaping supply chains, altering business models, and promoting sustainability-oriented innovation. The geographical expansion of apparel markets, ongoing globalisation, and the rapid establishment of fast fashion have significantly shifted consumer perceptions regarding fashion consumption [33]. These changes have facilitated the development of innovative business initiatives within the fashion sector.

Designers, creative directors, clothing resellers, stylists, photographers, advertisers, and marketing and sales professionals are positioned as key players capable of entrepreneurial and innovative actions. Within this environment, innovation in fashion enterprises emerges through the active involvement of multiple actors, leveraging external ideas via open innovation practices to enhance creativity and competitiveness [12]. The connection between entrepreneurship and innovation in the fashion industry has been strengthened by entrepreneurs who proactively reshape markets, aiming for high profitability and sustained creative excellence. Studies have emphasised this dynamic interplay, particularly within startup ecosystems, where incremental or radical innovations are developed over time [25,34–36]. Furthermore, innovative entrepreneurial initiatives flourish within the circular economy framework, promoting resource conservation and waste minimisation [2,37–40].

Although sustainable entrepreneurship in fashion differs between product-oriented and service-oriented startups [35], the commitment to continuous innovation remains central. The creativity of fashion entrepreneurs, whether expressed in customer-facing outputs or internal management and production systems, consistently aligns with the strategic goal of value creation across and beyond the enterprise. SINV in fashion enterprises goes

beyond circular production practices, incorporating organisational adaptation strategies and the creative reproduction of successful practices to enhance resilience, particularly for resource-constrained firms. According to Colucci and Vecchi [41] and Todeschini et al. [1], startups in the fashion industry contribute to SINV and circular value creation, promoting industry-wide collaboration and advancing sustainable entrepreneurship at both production and strategic levels. Kozlowski et al. [24] emphasise that SINV in fashion can be achieved through the reorganisation and enhancement of practices under the firm's direct control, such as product design and consumer engagement strategies. Therefore, within the broader framework of SINV in fashion enterprises, increasing emphasis is placed not only on technological advances but also on strategic capabilities, MS, CR, and adaptive imitation strategies (OBI and TBI) in building resilient and sustainable business models.

1.1.2. Imitation in Fashion Enterprises

Imitation is commonly defined as the adoption of behaviours or practices observed in others for learning, adaptation, or achieving comparable outcomes [42]. Within organisations, it denotes the transfer of strategies and routines already employed by other enterprises, thereby reducing uncertainty and improving the prospects of success [43]. Haunschild and Miner [44] distinguish, among others, two fundamental types, namely OBI, in which enterprises replicate products, services, or practices associated with favourable performance, and TBI, in which organisations adopt practices or routines from peers regarded as reputable or institutionally legitimate role models. Beyond mere replication, imitation functions as a mechanism of organisational learning and the diffusion of practices, thereby enhancing competitiveness, fostering entrepreneurial opportunities, and contributing to long-term value creation [45].

Various types and strategies of imitation significantly influence the entrepreneurial orientation of fashion enterprises and startups. Wild [16] emphasises that imitation has historically shaped strong relational dynamics within the fashion industry, as trends initiated by major houses establish standards that smaller firms emulate to remain competitive. Imitation also fulfils the consumer-driven demand for accessible, aesthetically appealing products by offering affordable alternatives to high-fashion designs. These dynamics foster the strategic reuse and adaptation of successful designs and stylistic standards, especially in environments characterised by limited resources and an increased focus on sustainability. In this context, imitation transcends its conventional perception as mere replication and emerges as a strategic lever for SINV. Numerous studies have highlighted the role of creative imitation in shaping business decision-making processes within the fashion sector [46,47]. Haunschild and Miner [44] distinguish three types of imitation: OBI, TBI, and frequency-based imitation (FBI). FBI occurs when firms imitate practices adopted by many other firms. In their study of entrepreneurial innovation, Tsolakidis et al. [26] found positive effects of OBI and TBI, but a statistically significant negative effect of FBI. They suggested that widespread imitation may weaken innovation, a finding they discussed in relation to Aarstad et al. [48]. The present study therefore focuses on OBI and TBI to examine their effects on SINV in fashion enterprises.

Aligned with this perspective, Dewey [49] and Maldini and Manz [50] emphasise that imitation in fashion is not merely copying but often represents renewal, adaptation, and differentiation. Through reinterpretation of existing templates, consumers express their identities while firms adapt more precisely to shifting market preferences. Enkel and Mezger [51] argue that imitation strategies, when applied creatively, can powerfully activate business model innovation. The aforementioned holds particularly true for fashion startups, which can leverage successful templates while tailoring them to their specific market contexts. Creatively applied imitation strategies enhance both innovation and

sustainability, allowing firms to utilise proven practices with reduced risk and lower R&D costs. As Vogel and Watchravesringkan [52] observe, trend imitation, when supported by a strong brand identity and strategic market adaptation, can be an effective strategy for consumer engagement and competitive advantage.

1.1.3. Creativity in Fashion Enterprises

CR, in a broad conceptual sense, refers to the generation of novel ideas, propositions, and solutions that are both original and potentially valuable to an organisation [53]. It has come to be recognised as a critical organisational asset, driving diverse forms of development and growth [54]. Importantly, CR marks the initial stage of innovation, forming the foundation on which the implementation and realisation of new ideas become possible [55].

CR is recognised as a fundamental driver of innovation in the fashion industry. It fosters the development of original designs, novel concepts, and alternative approaches, providing critical safeguards against monotony and repetition [56]. CR supports differentiation, which is crucial for innovation, and enables designers to respond more effectively to shifting consumer preferences [21]. According to Kabukcu [57], the cyclical and seasonal nature of fashion necessitates constant creative renewal to maintain competitiveness. In addition to fostering product originality, CR encourages collaboration among actors within the fashion ecosystem, strengthening networks and promoting the continuous generation of new ideas [58]. Thus, CR is not only associated with innovation but also with the establishment of a sustainable entrepreneurial identity. Recent research has underscored the positive relationship between CR and SINV practices in fashion enterprises, suggesting that CR supports sustainability-driven initiatives, reinforces resilience, and drives market-oriented innovation [2,59].

1.1.4. Managerial Skills in Fashion Enterprises

The attainment of organisational objectives, the coordination of activities, and the implementation of strategies for growth and innovation require effective managerial capabilities [60]. These capabilities are closely tied to knowledge management and knowledge creation processes within firms, which are fundamental enablers of SINV [61]. Managerial skills, in this respect, translate the style, strategies, and values of an organisation's executives into practical terms [62], thereby shaping how innovation and long-term growth are realised. They also encompass accumulated experience, decision-making competence, and adaptability-factors widely recognised as critical for enhancing competitiveness and advancing innovation [63]. According to Scullen et al. [64], the range of MS may also involve technical and professional knowledge, planning and organisational abilities, decision-making, communication, leadership, relationship management, and the capacity to collaborate and work effectively in teams. MS are critical determinants of success and innovation across all types of enterprises, including those in the fashion sector. Effective coordination and management of material and human resources have been consistently emphasised as fundamental conditions for organisational performance. Within fashion enterprises, the entrepreneur's MS have been recognised as pivotal for fostering innovation and sustainable growth. The development of MS among employees in fashion enterprises primarily leads to enhanced networking among firms, facilitating the creation of new knowledge and strengthening innovation capabilities, particularly in new product development [65]. In addition, cultivating skills such as strategic thinking, market analysis, and rational resource management is essential for the long-term sustainability of apparel businesses [66,67]. These competencies enable fashion enterprises to transition toward more responsible and sustainable operational models, emphasising resilience and long-term competitiveness. MS related to production coordination, marketing management, and resource optimisation

further reinforce a firm's prospects for stability and expansion, while also bolstering the personal passion and potential for success of creative entrepreneurs [68]. In general, appropriate MS are not only indispensable for effective coordination and rational decision-making but are also critical within the dynamically evolving fashion industry for predicting new trends and adapting to complex market demands [69]. In this regard, MS acts as enablers of strategic transformation toward SINV and long-term business development.

2. Methods

This study adopts a quantitative, cross-sectional research design to examine the correlates of SINV in fashion and apparel enterprises. The four constructs introduced in the theoretical background, namely OBI, TBI, CR, and MS, are treated as independent variables, with SINV as the dependent variable. The following subsections first develop the research hypotheses and present the proposed conceptual model (Section 2.1), then describe the sample and the data collection procedure (Section 2.2), and finally set out the measurement instrument, including the sources of the items and the control variables (Section 2.3). All constructs were measured on five-point Likert scales, the measurement model was assessed with confirmatory factor analysis, and the hypotheses were tested by means of hierarchical multiple regression estimated in two steps, with the control variables entered first.

2.1. Development of Research Hypotheses

2.1.1. Outcome-Based Imitation as a Driver of Sustainable Innovation in Fashion Enterprises

OBI serves as a critical mechanism for learning and strategic adaptation, especially in industries characterised by high uncertainty and creativity, such as fashion [70,71]. According to Haunschild and Miner [44], OBI involves adopting practices linked to observable and positive organisational outcomes. In the fashion industry, the final product (garments or accessories) represents such creative outcomes, embodying design and commercial choices that reflect market success [72]. These products become tangible subjects of imitation, enabling firms to adapt visibly successful models. Consumer behaviour in fashion is often shaped by mimetic patterns [73], creating a context where firms utilise creative imitation to design innovative products that align with market expectations. Under these conditions, OBI operates not only as a tool for market alignment but also as a low-risk innovation strategy, particularly beneficial for resource-constrained enterprises. Moreover, imitation in fashion is not passive copying; creative adaptations and enhancements play a crucial role in transforming imitation into a driver of innovation [17]. By selectively adapting successful practices, especially those that embody sustainability, OBI provides an accessible path to innovation with lower R&D investment.

Thus, the following research hypothesis is proposed:

Hypothesis 1. *OBI is positively associated with SINV in fashion enterprises.*

2.1.2. Trait-Based Imitation as a Driver of Sustainable Innovation in Fashion Enterprises

TBI involves selectively imitating practices, routines, or managerial techniques from other organisations based on their distinctive characteristics [44]. Prior research by Tsolakidis et al. [26] has confirmed a positive relationship between TBI and entrepreneurial innovation. Enterprises that imitate high-status organisations' practices can strengthen their own reputation and gradually build competitive advantages [74]. Selective and creative imitation of traits can thus serve as a catalyst for capability development and the promotion of innovation [75]. In sustainability contexts, imitation and innovation often act in complementary ways, facilitating the development of sustainable competitive advantages through the strategic exploration and adaptation of external practices [76]. Within the

fashion industry, where SINV can manifest across various dimensions [1,77], and many enterprises operate with limited resources [78], TBI is particularly significant. The adoption of successful strategies and practices from high-status enterprises strengthens sustainability and competitiveness [50]. Therefore, the following hypothesis is formulated:

Hypothesis 2. *TBI is positively associated with SINV in fashion enterprises.*

2.1.3. Creativity as a Driver of Sustainable Innovation in Fashion Enterprises

CR is a foundational element of the fashion industry, crucial for the continuous renewal and differentiation required for competitive advantage [78]. Despite technological advances, CR remains central to maintaining innovation within fashion enterprises [79]. Research indicates that CR fosters the development of sustainable and dynamic business models and promotes innovative solutions that support both competitiveness and environmental responsibility [80,81]. Within fashion, CR underpins the redesign, reuse, and renewal of products, supports sustainable consumption patterns, and drives the development of sustainability-focused strategies [82]. CR not only enhances aesthetic innovation but also advances material, technical, and production-related innovations [83].

Thus, the following hypothesis is proposed:

Hypothesis 3. *CR is positively associated with SINV in fashion enterprises.*

2.1.4. Managerial Skills as a Driver of Sustainable Innovation in Fashion Enterprises

MS are recognised as critical for coordinating resources, guiding organisational strategy, and fostering an environment conducive to innovation [84–86]. In fashion enterprises, MS enhances networking, fosters knowledge creation, and promotes the development of innovative products and services [65]. Skills such as strategic thinking, market understanding, and resource management are essential for aligning fashion businesses with sustainability goals [66,67]. Given the dynamic and complex nature of the fashion industry, MS enables leaders to anticipate trends, adapt to shifting market demands, and integrate sustainable practices into their strategic plans [69].

Thus, the following research hypothesis is formulated:

Hypothesis 4. *MS are positively associated with SINV in fashion enterprises.*

2.1.5. Proposed Research Model

Building on the preceding theoretical discussion and research hypotheses developed above, the proposed conceptual model aims to explore the relationship between four key determinants, OBI, TBI, CR, MS and SINV in fashion enterprises.

Specifically:

Outcome-Based Imitation (OBI): The adoption of practices associated with visibly successful and measurable outcomes.

Trait-Based Imitation (TBI): The imitation of strategies, routines, or distinctive characteristics from high-status or leading enterprises.

Creativity (CR): The ability to generate new ideas, approaches, and products aimed at fostering innovation and sustainability.

Managerial Skills (MS): The strategic, organisational, and resource management competencies that support the development and implementation of SINV.

Each of these four factors is hypothesised to have a direct and positive relationship with SINV in fashion enterprises.

The conceptual research model is represented in Figure 1.

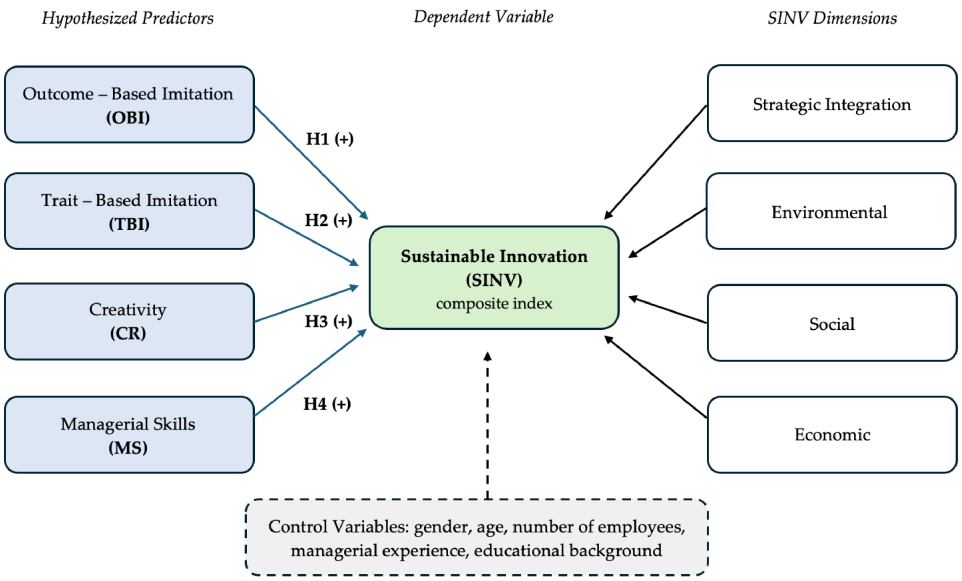

Figure 1. The set-up of the conceptual research model. Dashed arrows indicate the effects of the control variables.

This model is designed to empirically examine how these factors are associated with SINV in the dynamic, resource-constrained, and innovation-driven environment of the fashion industry.

To test the hypotheses, two nested linear regression models are estimated by hierarchical multiple regression:

$$\text{Model 1: } SINV_i = \beta_0 + \beta_1 Gender_i + \beta_2 Age_i + \beta_3 Employees_i + \beta_4 Experience_i + \beta_5 Background_i + \varepsilon_i$$

$$\text{Model 2: } SINV_i = \beta_0 + \beta_1 Gender_i + \ldots + \beta_5 Background_i + \beta_6 OBI_i + \beta_7 TBI_i + \beta_8 CR_i + \beta_9 MS_i + \varepsilon_i$$

where i indexes' respondents (i = 1, …, 175), β0 is the intercept, β1–β9 are regression coefficients and εi is the error term. Model 1 contains only the control variables; Model 2 adds the four hypothesised predictors, so that the increase in explained variance (ΔR2) can be attributed to OBI, TBI, CR and MS. Hypotheses H1–H4 predict positive coefficients β6–β9.

2.2. Sample and Data Collection

The research sample consisted of managerial executives employed in companies and startups operating in the apparel and fashion sector in Greece. Data were collected via snowball sampling [87], through questionnaires disseminated in both hard-copy and online forms. Data collection took place between September and October 2025. The survey targeted managerial executives responsible for managing fashion and apparel enterprises in Greece.

The questionnaire was administered anonymously, and respondents were informed that there were no right or wrong answers. Given the survey's anonymous nature, the number of respondents per enterprise could not be independently verified. Questions measuring sustainable innovation (SINV) and the independent variables (OBI, TBI, CR and MS) were presented in separate sections.

In total, 287 questionnaires were distributed, of which 175 were fully completed and suitable for analysis, corresponding to a usable completion rate of 60.98%. This sample captures the attitudes and behaviours of executives actively involved in the management of firms in this sector, thereby ensuring alignment with the theoretical framework of the study.

The sample is balanced by gender (50.3% men, 49.7% women) and spread across all age groups, with 42.3% of respondents aged 31–50 (Table 1). Most respondents manage

micro or small enterprises: 54.9% report having up to 8 employees and 21.1% 16 or more, consistent with the predominance of small, design-led firms in the Greek fashion and apparel sector. Managerial experience is substantial (38.9% report ten or more years), and a large majority (80.6%) have an artistic or design educational background. This composition has two implications for the analysis. First, educational background is strongly related to the study variables (see Section 3.1) and is therefore retained as a control variable. Second, the predominance of design-trained managers contributes to the concentration of responses examined in the "Response distribution and sensitivity analyses" section.

Table 1. Profile of the sample (N = 175).

Characteristic	Category	n	%
Gender	Male	88	50.3
	Female	87	49.7
Age (years)	18–30	28	16.0
	31–40	33	18.9
	41–50	41	23.4
	51–60	35	20.0
	61+	38	21.7
Number of employees	1–3	49	28.0
	4–8	47	26.9
	9–15	42	24.0
	16+	37	21.1
Managerial experience	1–3 years	49	28.0
	4–9 years	58	33.1
	10+ years	68	38.9
Educational background	Artistic/design	141	80.6
	Other	34	19.4

2.3. Measures and Instrument

All variables in this study were measured using a five-point Likert scale (1: Strongly Disagree–5: Strongly Agree). This measurement approach is widely used in social science research [88,89]. The source studies used seven-point response formats; a five-point format was adopted here for all items. The full instrument is reported in Table 2, which provides the wording of each item, its source, and the referent that respondents were asked to evaluate. Because no validated instrument covered all constructs in the context of fashion and apparel enterprises, items were either adapted from prior studies or developed by the authors based on established construct definitions, as described below.

SINV was measured with four items adapted from the sustainability-oriented innovation scale of Baxter and Chipulu [90]. Each item was drawn from a different dimension of that multidimensional scale, namely, the strategic integration of sustainability into new product and service development and the environmental, social, and economic value of innovation, in line with indicator-based approaches that assess sustainable innovation across the triple bottom line, as outlined by Gunarathne [91]. Items were rephrased to reflect the context of the fashion and apparel industry. Because the items deliberately sample distinct facets rather than repeat the same content, SINV is treated as a composite index rather than as a reflective scale (see "Measurement model").

For the imitation constructs, we followed the framework of Haunschild and Miner [44]. OBI was measured with five items: two were adapted from Aarstad et al. [48] (OBI_2, OBI_3), and three were developed by the authors from the definition of OBI as the imitation of practices associated with visible positive outcomes. TBI was measured with five items

developed by the authors within the same framework, capturing imitation of enterprises recognised for their status, expertise, or leadership in the industry; Aarstad et al. [48] measured this mode with a single item that did not empirically separate from frequency-based imitation.

Table 2. Measurement instrument: items, sources and referents.

Item	Wording	Source/Origin	Referent
Sustainable innovation (SINV): composite index of four dimensions			
SINV_1	Our enterprise systematically integrates sustainability considerations into the development of new products and services.	Adapted from Baxter & Chipulu [90]: strategic integration	Enterprise
SINV_2	Our enterprise develops new products and services to reduce their negative environmental impact.	Adapted from Baxter & Chipulu [90]: environmental	Enterprise
SINV_3	Our enterprise incorporates social considerations into the development of new products, services, or business practices.	Adapted from Baxter & Chipulu [90]: social	Enterprise
SINV_4	Our enterprise develops sustainability-oriented innovations that contribute to long-term economic value.	Adapted from Baxter & Chipulu [90]: economic	Enterprise
Outcome-based imitation (OBI)			
OBI_1	When an enterprise in the industry succeeds with a particular strategy, we are likely to adopt it as well.	Developed by the authors from Haunschild & Miner [44]	Enterprise
OBI_2	When other enterprises in the industry achieve high-quality products or services, we use their practices as models for our own enterprise.	Adapted from Aarstad et al. [48]	Enterprise
OBI_3	When we observe that other enterprises have efficient routines or operating processes, we try to implement similar practices in our enterprise.	Adapted from Aarstad et al. [48]	Enterprise
OBI_4	We tend to adopt practices used by other enterprises when these practices have produced successful business outcomes.	Developed by the authors from Haunschild & Miner [44]	Enterprise
OBI_5	The performance improvements achieved by other enterprises influence our decision to adopt similar practices.	Developed by the authors from Haunschild & Miner [44]	Enterprise

Table 2. *Cont.*

Item	Wording	Source/Origin	Referent
Trait-based imitation (TBI)			
TBI_1	We observe the practices of the most recognised or experienced enterprises in the industry and often imitate them.	Developed by the authors from Haunschild & Miner [44]	Enterprise
TBI_2	We are inclined to adopt practices from enterprises because of their recognised expertise in the industry.	Developed by the authors from Haunschild & Miner [44]	Enterprise
TBI_3	We are more likely to imitate enterprises that are recognised as leaders or experts in the industry.	Developed by the authors from Haunschild & Miner [44]	Enterprise
TBI_4	When adopting new practices, we tend to follow enterprises recognised as industry leaders.	Developed by the authors from Haunschild & Miner [44]	Enterprise
TBI_5	The reputation and expertise of an enterprise influence whether we consider its practices worthy of imitation.	Developed by the authors from Haunschild & Miner [44]	Enterprise
Creativity (CR)			
CR_1	In my job, I suggest new ideas that can improve processes or products within the enterprise.	Developed by the authors; informed by Muñoz-Pascual et al. [92] (fluency)	Self
CR_2	In my job, I generate original ideas that can improve existing ways of working.	Developed by the authors; informed by Muñoz-Pascual et al. [92] (originality)	Self
CR_3	In my job, I try to find different solutions to problems and challenges.	Developed by the authors; informed by Muñoz-Pascual et al. [92] (flexibility)	Self
CR_4	In my job, I actively explore new approaches and possibilities when developing ideas.	Developed by the authors; informed by Muñoz-Pascual et al. [92] (flexibility)	Self
CR_5	In my job, I combine existing ideas or knowledge in novel ways to develop creative solutions.	Developed by the authors; informed by Muñoz-Pascual et al. [92] (elaboration)	Self
Managerial skills (MS)			
MS_1	Managers demonstrate the ability to coordinate and organise the firm's activities effectively.	Adapted from Guo et al. [93]	Managers of the enterprise

Table 2. *Cont.*

Item	Wording	Source/Origin	Referent
MS_2	Managers provide employees with clear direction regarding their tasks and responsibilities.	Adapted from Asghar et al. [60]	Managers of the enterprise
MS_3	Managers demonstrate the ability to make effective decisions when problems arise.	Adapted from Asghar et al. [60]	Managers of the enterprise
MS_4	Managers effectively guide and support employees in achieving the firm's objectives.	Adapted from Asghar et al. [60]	Managers of the enterprise
MS_5	Managers demonstrate the ability to adapt effectively to technological and organisational changes.	Adapted from Asghar et al. [60]	Managers of the enterprise

Note: All items were rated on a five-point scale (1 = strongly disagree; 5 = strongly agree) and administered in Greek; the English wording is shown. Referent: what respondents were asked to evaluate (their enterprise, themselves, or the managers of their enterprise).

CR was measured with five items developed by the authors, informed by the dimensions of creative thinking (fluency, flexibility, originality and elaboration) used by Muñoz-Pascual et al. [92]. Unlike that organisation-level measure, the present items refer to the respondent's own behaviour at work. An example item is "In my job, I suggest new ideas that can improve processes or products within the enterprise."

MS were measured with five items adapted from the managerial skills described by Asghar et al. [60], namely providing clear direction, decision-making, guiding and supporting employees, and adapting to technological change, and from Guo et al. [93] for the coordination and organisation of firm activities. An example item is "Managers demonstrate the ability to coordinate and organise the firm's activities effectively."

In addition, several control variables were included: gender (male/female), age (18–30, 31–40, 41–50, 51–60, 61+), number of employees (firm size) within the fashion and apparel industry (1–3, 4–8, 9–15, 16+ employees), managerial (work) experience (1–3, 4–9, 10+ years), and whether the manager held an artistic/design educational background. The inclusion of these controls follows earlier empirical work [94].

Respondents acted as key informants on their enterprise [95]. As shown in the last column of Table 2, the SINV, OBI and TBI items refer to the enterprise ("Our enterprise...", "we..."), the CR items refer to the respondent's own behaviour at work ("In my job, I..."), and the MS items refer to the managers of the enterprise. Using managers as key informants on enterprise-level practices is common in research on small firms, where managers typically have the most complete view of strategy and innovation. In the micro and small enterprises that make up most of the sample, the key decision-maker's creativity is also closely tied to the enterprise's creative capacity. The mixed levels of reference are nevertheless acknowledged as a limitation. The questionnaire was developed in English and translated into Greek using forward–back translation [96]. Before data collection, the Greek instrument was reviewed by experts, who assessed each item's relevance to its construct and its clarity for respondents in the Greek fashion and apparel sector. No separate pilot study was conducted; therefore, the reliability and validity of the measures were assessed in the main sample (see "Measurement model"), which is acknowledged as a limitation.

3. Results

3.1. Descriptive Statistics and Reliability

All analyses were conducted in R 4.3.3 [97], using lavaan [98] and semTools [99] for the measurement model and sandwich [100] and boot for robust and bootstrap inference. Table 3 reports the means, standard deviations and Pearson correlations of all study variables. The mean scores of the five constructs were close to 4 (3.93–3.95) with small standard deviations (0.33–0.45), indicating strong clustering of responses around "agree" (see "Response distribution and sensitivity analyses"). SINV was strongly correlated with OBI (r = 0.73), TBI (r = 0.74), CR (r = 0.75) and MS (r = 0.71), and the four predictors were also highly intercorrelated (r = 0.68–0.73; all $p < 0.001$). Among the control variables, educational background (1 = artistic/design, 2 = other) was strongly associated with SINV (r = −0.65, $p < 0.001$) and with all four predictors (r = −0.38 to −0.42), whereas age showed a weak positive correlation with SINV (r = 0.15, $p < 0.05$).

Table 3. Means, standard deviations and correlations of the study variables (N = 175).

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. SINV	3.93	0.39									
2. OBI	3.95	0.45	0.73 ***								
3. TBI	3.94	0.36	0.74 ***	0.68 ***							
4. CR	3.93	0.34	0.75 ***	0.68 ***	0.73 ***						
5. MS	3.93	0.33	0.71 ***	0.69 ***	0.72 ***	0.68 ***					
6. Gender	1.50	0.50	0.12	0.08	0.04	0.12	0.13				
7. Age	3.13	1.38	0.15 *	0.05	−0.01	0.11	0.15	−0.02			
8. Employees	2.38	1.11	−0.00	0.04	−0.01	0.00	−0.00	−0.02	−0.11		
9. Experience	2.11	0.81	0.11	0.16 *	0.18 *	0.17 *	0.12	0.08	0.14	−0.08	
10. Background	1.19	0.40	−0.65 ***	−0.42 ***	−0.42 ***	−0.42 ***	−0.38 ***	−0.03	−0.15 *	0.04	−0.05

Note: * $p < 0.05$; *** $p < 0.001$. Construct scores are item means (range 1–5); SINV is a composite index of four dimensions. Gender: 1 = male; 2 = female. Background: 1 = artistic/design; 2 = other. Reliability coefficients are reported in Table 4.

The measurement model was assessed with confirmatory factor analysis (CFA) estimated by robust maximum likelihood (MLR), given the non-normality of the items. OBI, TBI, CR and MS were specified as reflective constructs. SINV was specified as a composite index, the mean of its four indicators, because each indicator represents a different dimension of sustainable innovation (strategic integration, environmental, social and economic) and the indicators are therefore not expected to be interchangeable [101,102]. Consistent with this specification, the SINV indicators were only weakly intercorrelated (mean r = 0.18; α = 0.48), showed no collinearity (VIF = 1.04–1.14) and each correlated 0.51–0.70 with the index; the mean inter-item correlation lies within the 0.15–0.50 range recommended for broad constructs [103]. A reflective specification of SINV yielded inadmissible solution estimates (standardised loadings of 0.29–0.53; latent correlations with the predictors above 1), further supporting the composite specification.

The CFA, with the SINV index included as an observed variable correlated with the four factors, fitted the data well: $\chi^2(180) = 210.69$, $p = 0.058$; CFI = 0.979; TLI = 0.976; RMSEA = 0.032 (90% CI 0.000–0.049); SRMR = 0.047 (Table 4). All items loaded significantly on their intended factor (standardised loadings 0.50–0.83, all $p \leq 0.001$; Table A4), and the four-factor model fitted significantly better than a single-factor model of the same 20 items ($\Delta\chi^2(6) = 116.93$, $p < 0.001$; ΔCFI = 0.044). Internal consistency was acceptable for the four reflective constructs (α = 0.72–0.86; ω = 0.73–0.86). The average variance extracted (AVE) exceeded 0.50 for OBI (0.56) but was below this benchmark for TBI (0.48), CR (0.35) and MS (0.37), indicating modest convergent validity for these three constructs.

Table 4. Measurement model: fit, reliability and convergent validity.

Panel A. Model fit					
Model	χ^2 (df)	CFI	TLI	RMSEA [90% CI]	SRMR
Four reflective factors + SINV index	210.69 (180)	0.979	0.976	0.032 [0.000, 0.049]	0.047
One factor (20 predictor items)	261.95 (170)	0.931	0.923	0.056 [0.042, 0.069]	0.055
Five reflective factors (SINV reflective) [a]	293.91 (242)	0.967	0.963	0.036 [0.018, 0.049]	0.049
Panel B. Reliability and convergent validity					
Construct	Items	Std. loadings	α	ω	AVE
SINV (composite index)	4	VIF 1.04–1.14 [b]	0.48	–	–
OBI	5	0.66–0.83	0.86	0.86	0.56
TBI	5	0.60–0.76	0.81	0.82	0.48
CR	5	0.51–0.66	0.72	0.73	0.35
MS	5	0.50–0.69	0.73	0.74	0.37

Note: Robust maximum likelihood (MLR); scaled χ^2 and robust CFI, TLI and RMSEA. [a] Inadmissible solution: latent correlations of SINV with the predictors > 1. [b] For the composite index, indicator collinearity (VIF) is reported instead of loadings; α is shown for information only. All loadings $p \leq 0.001$.

Discriminant validity was assessed with the Fornell–Larcker criterion, the heterotrait–monotrait ratio (HTMT) [104] and χ^2-difference tests constraining each latent correlation to unity (Table 5). The latent correlations among the four predictors were high (0.81–0.94). HTMT values were below 0.85 for all pairs involving OBI (0.80–0.84) but exceeded 0.90 for TBI–CR (0.94), TBI–MS (0.92) and CR–MS (0.92); the Fornell–Larcker criterion was not met, and for no pair could a correlation of 1 be rejected ($p = 0.16$–0.47). Thus, although the predictors form distinct factors that fit better than a single factor, discriminant validity is limited, particularly among TBI, CR and MS. The regression results are therefore interpreted as associations of correlated predictors, and the relative contribution of each predictor is examined formally (see Section 3.2).

Table 5. Discriminant validity.

Construct	OBI	TBI	CR	MS
OBI	**0.75**	*0.80*	*0.84*	*0.84*
TBI	0.81	**0.69**	*0.94*	*0.92*
CR	0.84	0.94	**0.60**	*0.92*
MS	0.89	0.91	0.91	**0.61**
SINV index	0.78	0.81	0.88	0.83

Note: Diagonal (bold): square root of AVE. Below the diagonal: latent correlations from the CFA. Above the diagonal (italics): HTMT ratios. Last row: correlations of the SINV composite index with the latent factors. χ^2-difference tests constraining each latent correlation to 1: $p = 0.16$–0.47 for all pairs.

Because all variables were self-reported by the same respondents at a single time point, common method variance (CMV) was assessed using four procedures [105]. First, in Harman's single-factor test, the first unrotated component explained 39.97% of the variance in the 24 items, below the 50% threshold. Second, a single-factor CFA fitted clearly worse than the measurement model (20 predictor items: ΔCFI = 0.044, $\Delta\chi^2(6) = 116.93$,

$p < 0.001$; all 24 items: $\Delta CFI = 0.047$, $\Delta\chi^2(10) = 75.71$, $p < 0.001$). Third, an unmeasured latent method factor with equal loadings on all predictor items could not be separated from the shared variance of the substantive factors (its loading was estimated at zero); because the substantive factors are highly correlated, this test is inconclusive. Fourth, full-collinearity VIFs [106] were 2.58–2.94 for the predictors and 3.33 for SINV, the latter at the recommended threshold of 3.3. Overall, a single method factor does not account for most of the covariance, but CMV cannot be ruled out and may have inflated the observed associations; this is acknowledged as a limitation.

The normality of the variables (SINV, OBI, TBI, CR, MS) in the proposed model was assessed using the Kolmogorov–Smirnov test [107] and the Shapiro–Wilk test [108]. Both tests indicated statistically significant deviations from normality ($p < 0.001$), with signs of negative skewness and heightened kurtosis. However, given the sample size (n = 175) and the focus on Ordinary Least Squares (OLS) regression, attention was placed on the model residuals. The Normal P-P plot (see Figure 2) showed satisfactory alignment with the diagonal, and standardised residuals ranged approximately from −2.83 to 2.55, suggesting an acceptable approximation of normality in the error terms.

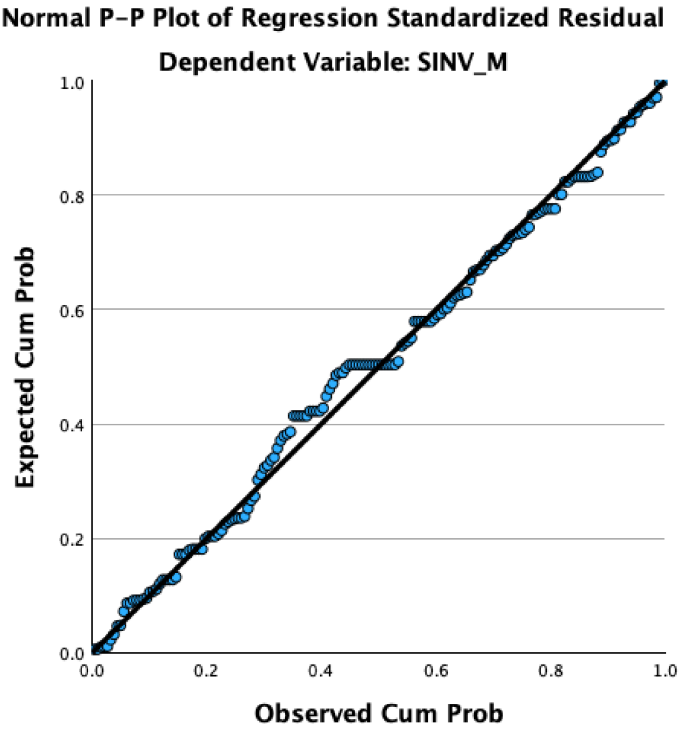

Figure 2. P-P Normality check plot.

Multicollinearity was then evaluated using Tolerance and Variance Inflation Factor (VIF) statistics [109]. VIF values ranged from 1.03 to 3.02, with all Tolerance values above 0.33, indicating no problematic overlap among predictors. Finally, the independence of errors was confirmed by the Durbin–Watson statistic (DW = 1.920 ≈ 2). However, the Breusch–Pagan test indicated heteroscedasticity (Model 2: $p = 0.004$); all inferences are therefore based on heteroscedasticity-consistent (HC3) standard errors [110], and 95% percentile bootstrap confidence intervals (5000 resamples) are reported for the regression coefficients.

3.2. Hypothesis Testing and Regression Results

Hierarchical multiple regression analysis was conducted in two steps. In Step 1, only the control variables (gender, age, number of employees, work experience, and educational background) were entered. In Step 2, the main independent variables (OBI, TBI, CR, MS) were added. The full model was statistically significant, $F(9, 165) = 67.83$, $p < 0.001$, with $R^2 = 0.787$ and adjusted $R^2 = 0.776$. The inclusion of the main predictors substantially improved the explanatory power of the model ($\Delta R^2 = 0.350$, F-change$(4, 165) = 67.92$, $p < 0.001$, compared to the model with controls only).

In Model 1, the control variables explained 43.7% of the variance in SINV ($F(5, 169) = 26.23$, $p < 0.001$; adjusted $R^2 = 0.420$). This was due almost entirely to educational background ($B = -0.627$, $\beta = -0.633$, $p < 0.001$): respondents with an artistic/design background reported higher SINV. None of the other control variables were significant (all $p \geq 0.075$).

In Model 2 (Table 6), OBI ($B = 0.175$, $\beta = 0.201$, $p = 0.041$), TBI ($B = 0.222$, $\beta = 0.203$, $p = 0.017$) and CR ($B = 0.269$, $\beta = 0.235$, $p = 0.037$) were positively and significantly associated with SINV, supporting H1–H3. MS was also positively associated with SINV ($B = 0.168$, $\beta = 0.141$), but this association was not significant with heteroscedasticity-consistent standard errors ($p = 0.063$), although its bootstrap confidence interval excluded zero (95% CI [0.031, 0.385]); H4 therefore receives only weak support. All *p*-values are based on HC3 standard errors.

Table 6. Hierarchical regression of SINV on the control variables (Model 1) and the hypothesised predictors (Model 2).

	Model 1			Model 2			
Variable	**B**	**SE**	**β**	**B**	**SE**	**β**	**95% CI**
Constant	4.416 ***	0.126		0.958 †	0.531		[−0.494, 1.476]
Gender	0.081	0.045	0.103 †	0.038	0.030	0.048	[−0.018, 0.096]
Age	0.015	0.016	0.052	0.016	0.011	0.056	[−0.004, 0.036]
Number of employees	0.012	0.021	0.034	0.002	0.015	0.005	[−0.028, 0.027]
Work experience	0.034	0.030	0.070	−0.019	0.017	−0.040	[−0.053, 0.012]
Educational background	−0.627	0.086	−0.633 ***	−0.313	0.041	−0.316 ***	[−0.384, −0.231]
OBI				0.175	0.085	0.201 *	[0.022, 0.306]
TBI				0.222	0.092	0.203 *	[0.077, 0.442]
CR				0.269	0.128	0.235 *	[0.105, 0.508]
MS				0.168	0.090	0.141 †	[0.031, 0.385]
R^2	0.437			0.787			
Adjusted R^2	0.420			0.776			
F (df)	26.23 *** (5, 169)			67.83 *** (9, 165)			
ΔR^2 (F-change)	–			0.350 *** (67.92)			
Durbin–Watson	1.840			1.920			

Note: N = 175. B = unstandardised coefficient; SE = heteroscedasticity-consistent standard error (HC3); β = standardised coefficient; 95% CI = percentile bootstrap confidence interval for B (5000 resamples). Significance based on HC3 standard errors: † $p < 0.10$; * $p < 0.05$; *** $p < 0.001$. Educational background: 1 = artistic/design; 2 = other. VIF (Model 2) = 1.03–3.02.

Among the control variables, educational background (coded 1 = yes, design/art-related; 2 = no) was statistically significant, with a negative coefficient ($B = -0.313$, $\beta = -0.316$, $p < 0.001$). The negative coefficient indicates that respondents with a design or artistic educational background report higher SINV than those without such training.

The remaining control variables (gender, age, number of employees, and work experience) were not statistically significant predictors ($p > 0.10$).

The four predictors increased the explained variance by 35.0 percentage points ($\Delta R^2 = 0.350$, F-change (4, 165) = 67.92, $p < 0.001$; Cohen's $f^2 = 1.65$). Because the predictors are highly correlated, we tested formally whether their contributions differ (Table 7). Wald tests based on HC3 standard errors showed no difference between the standardised coefficients (joint test $F(3, 165) = 0.21$, $p = 0.887$; all pairwise $p \geq 0.50$), and relative-weight analysis [111] attributed similar shares of the explained variance to OBI (18.9%), TBI (19.1%), CR (20.4%) and MS (16.8%), with overlapping bootstrap confidence intervals. The four predictors therefore make comparable contributions to SINV, and none can be identified as the strongest.

Table 7. Relative contribution of the predictors to the explained variance in SINV (Model 2).

Panel A. Relative weights [111]			
Predictor	Raw relative weight	95% bootstrap CI	% of R^2
OBI	0.149	[0.095, 0.186]	18.9
TBI	0.150	[0.112, 0.184]	19.1
CR	0.160	[0.121, 0.201]	20.4
MS	0.133	[0.093, 0.168]	16.8
Educational background	0.177	[0.135, 0.227]	22.4
Gender	0.006	[0.001, 0.025]	0.8
Age	0.010	[0.002, 0.034]	1.3
Number of employees	0.000	[0.000, 0.011]	0.0
Work experience	0.002	[0.001, 0.015]	0.3
Panel B. Equality of standardised coefficients (Wald tests, HC3)			
Hypothesis	Difference in β	F (df)	*p*
OBI = TBI	−0.002	0.00 (1, 165)	0.990
OBI = CR	−0.034	0.03 (1, 165)	0.861
OBI = MS	0.060	0.19 (1, 165)	0.665
TBI = CR	−0.032	0.06 (1, 165)	0.812
TBI = MS	0.062	0.30 (1, 165)	0.582
CR = MS	0.093	0.45 (1, 165)	0.503
All four equal	–	0.21 (3, 165)	0.887

Note: Relative weights partition $R^2 = 0.787$ among correlated predictors; confidence intervals from 5000 bootstrap resamples.

To further substantiate these results, mean values of SINV were compared across the control variable educational background (coded 1 = design/artistic background; 2 = no such background). Participants with a design/artistic background (n = 141, M = 4.06) reported significantly higher SINV compared to those without such a background (n = 34, M = 3.42). Welch's test confirmed this difference (t = 7.494, df ≈ 36.95, $p < 0.001$), with a 95% confidence interval for the mean difference of (0.467, 0.812). This difference corresponds to a very large effect size (Hedges' g = 2.12) and is consistent with the Model 1 coefficient. Respondents with an artistic/design background also scored higher on OBI, TBI, CR and MS (g = 1.02–1.17; all $p \leq 0.003$). However, educational background did not moderate any of the four associations (interaction terms, all $p \geq 0.60$), and it remained significantly associated with SINV after controlling for the four predictors (Model 2).

Responses were strongly concentrated: 81.8% of all item responses were "agree" (4), and for 117 respondents (66.9%) at least 20 of the 24 answers were 4 (Table A1). Items were negatively skewed (skewness up to −2.80) and leptokurtic (kurtosis up to 13.1). Because the questionnaire contained no reverse-keyed items, acquiescence cannot be separated from

substantive agreement. Most of the variance in the constructs came from the 34 respondents without an artistic/design background, whose scores were lower and more dispersed (SD = 0.48–0.86) than those of the 141 respondents with such a background (SD = 0.19–0.24). Within the design-background group, where the range of responses is strongly restricted, internal consistency was low, and the model explained less variance ($R^2 = 0.41$), with only CR remaining significant ($p = 0.010$; Table A2). After excluding 12 influential observations (Cook's D > 4/n), TBI, CR and MS remained significant, whereas OBI did not ($p = 0.32$; Table A3).

Finally, because SINV comprises four dimensions, Model 2 was re-estimated separately for each dimension using ordinal logistic regression (Table 8). The predictors were associated with the economic dimension (OBI, TBI, and CR) and the social dimension (TBI and CR), but none were associated with the environmental dimension or the strategic integration of sustainability. Taken together, these analyses indicate that the high explanatory power of the full model ($R^2 = 0.79$) partly reflects differences between respondent groups and restricted response ranges, and should not be read as a precise estimate of the strength of the relationships.

Table 8. Sensitivity analysis: associations with each SINV dimension (ordinal logistic regression).

Predictor	Strategic Integration	Environmental	Social	Economic
OBI	1.26 [0.74, 2.15]	1.08 [0.59, 1.95]	0.70 [0.37, 1.34]	2.88 * [1.25, 6.63]
TBI	0.67 [0.38, 1.19]	1.28 [0.70, 2.32]	2.38 ** [1.26, 4.53]	3.40 *** [1.65, 7.01]
CR	1.46 [0.83, 2.56]	1.74 [0.91, 3.35]	2.20 * [1.11, 4.37]	2.21 * [1.15, 4.23]
MS	1.55 [0.90, 2.67]	1.30 [0.73, 2.29]	1.68 [0.93, 3.03]	0.72 [0.38, 1.35]
Educational background [a]	0.27 ** [0.11, 0.68]	0.20 ** [0.07, 0.54]	0.22 ** [0.08, 0.60]	0.50 [0.19, 1.34]

Note: Odds ratios [95% CI] per one standard deviation of the predictor; all models include gender, age, number of employees and work experience. Response categories 1 and 2 were merged due to low frequency. [a] Other vs. artistic/design background. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

4. Discussion

This study examined the relationships between two imitation strategies (OBI and TBI), CR and MS with SINV in Greek fashion and apparel enterprises. The findings indicate positive associations between all four predictors and SINV. However, only OBI, TBI and CR remained statistically significant when heteroscedasticity-consistent standard errors were used, while the association for MS did not reach the conventional 5% significance level. Although the standardised coefficients differed numerically, the Wald tests did not identify statistically significant differences between them. Thus, the findings do not establish that any one predictor is more strongly associated with SINV than the others. The positive associations observed for imitation strategies are consistent with Haunschild and Miner's [44] conceptualisation of imitation as a form of organisational learning.

The positive association between imitation strategies and SINV is consistent with prior evidence [26], which demonstrated that imitation can significantly enhance entrepreneurial innovation among startups by facilitating knowledge transfer and reducing uncertainty. The present study extends this discussion to sustainable innovation in fashion enterprises. However, the dimension-specific analyses identified statistically significant associations mainly for the economic and social dimensions of SINV, with no statistically significant associations identified for its environmental or strategic dimensions.

These findings are further supported by Enkel and Mezger [51], who argue that creative imitation serves as a catalyst for innovation when accompanied by an organisation's internal capacity for adaptation and contextual reasoning. Similarly, Maldini and Manz [50] highlight that imitation within fashion is not a passive act of replication but a dynamic

process of reinterpretation and transformation that generates new avenues for creative differentiation and innovation.

The positive association between CR and SINV is in line with previous studies [57,59,82] that emphasise the role of creativity in fashion innovation. Creativity may help enterprises reinterpret existing ideas and develop alternative approaches to products, processes, and business practices. The literature also connects creative approaches in fashion with material reuse, circular production, supply chain collaboration, and digital services [2,24]. However, the present findings do not establish which of these practices account for the observed association, nor do they demonstrate that creativity is more strongly related to SINV than the imitation strategies examined.

The association between MS and SINV was positive but did not reach statistical significance when heteroscedasticity-consistent standard errors were used. This result provides more limited support for the proposed relationship than initially suggested by the conventional regression estimates. Nevertheless, managerial competencies remain relevant to the theoretical discussion, as previous studies have linked them to innovation performance and the development of sustainable business models [69,84,85]. The present findings should therefore be interpreted as inconclusive regarding the independent association between MS and SINV, rather than as evidence that managerial skills are unimportant. The findings also indicate differences in reported SINV according to respondents' educational background. Participants with an arts or design background reported higher SINV scores than those with other educational backgrounds, and this association remained statistically significant after accounting for the other variables in the regression model. They also reported higher levels of creativity. These findings may suggest that design-related education and experience are associated with approaches to innovation that are not fully captured by the creativity measure used in this study. However, the unequal sizes of the educational groups and the self-reported nature of the data call for caution in interpreting these differences.

Taken together, the findings suggest that imitation strategies and creativity are associated with reported sustainable innovation in Greek fashion and apparel enterprises. They are compatible with the view that imitation and innovation need not be opposing approaches, particularly where existing practices and ideas are adapted to new organisational contexts. This interpretation is consistent with Lieberman and Asaba [45], who discuss imitation in relation to uncertainty, and with Pérez-Luño et al. [76], who examine the relationship between imitation and innovation strategies. In this respect, the present findings contribute to the literature by showing that both imitation strategies and creativity are positively associated with sustainable innovation in the fashion sector, particularly in relation to its economic and social dimensions. The findings also have practical implications for fashion entrepreneurs, educators, and policymakers. Entrepreneurs may consider combining imitation strategies with creative approaches to sustainable innovation. The differences associated with educational background suggest that sustainability could receive greater attention in design education, while policy initiatives could support knowledge sharing and the adaptation of existing practices. These implications should be interpreted with caution, as the findings do not establish causal relationships.

5. Conclusions

This study examined how imitation strategies, creativity and managerial skills are associated with SINV in fashion and apparel enterprises. Drawing on survey data from 175 managers in the Greek fashion and apparel sector, the study found that OBI, TBI, and CR were positively and significantly associated with SINV. In contrast, the positive association with MS was not robust to the use of heteroscedasticity-consistent standard errors. The four predictors made statistically comparable contributions, and the associations concerned

mainly the economic and social dimensions of SINV. A design or artistic educational background was also associated with higher SINV. For practitioners, these findings suggest that sustainability-oriented innovation in this sector may not depend solely on radical technological investment but may also involve adapting proven practices from other firms and fostering creativity. Given the cross-sectional design, these associations should not be interpreted causally.

This research represents one of the first empirical efforts to jointly examine the associations of imitation strategies, creativity, and managerial skills on SINV among fashion and apparel enterprises in the Greek market. This contribution enhances the existing body of knowledge and offers new insights into factors associated with sustainable business practices in a highly competitive and creativity-driven industry context.

6. Limitations and Future Research

Although this study provides valuable insights, several limitations should be acknowledged. First, the sample was confined to managerial respondents from Greek fashion and apparel enterprises, which restricts the generalisability of the findings beyond this specific context.

Second, the use of a self-reported Likert-scale (1: Strongly Disagree–5: Strongly Agree) questionnaire may have been affected by respondents' tendency to provide socially desirable answers. Furthermore, the cross-sectional design, based on data collected at a single point in time, constrains the ability to infer causal direction among the variables. The measurement analyses also indicated limitations in discriminant validity, particularly among TBI, CR and MS, suggesting that their individual associations with SINV should be interpreted with caution.

Fourth, all measures were obtained from the same respondents at a single point in time; although the statistical tests indicated that a single method factor does not account for most of the covariance, common method variance cannot be ruled out and may have inflated the associations and the explained variance. Fifth, no separate pilot study was conducted, several items were newly developed or adapted, and SINV was measured as a composite index of four single-item dimensions. Sixth, responses were strongly concentrated around "agree", and the questionnaire contained no reverse-keyed items, so acquiescence cannot be separated from substantive agreement. Finally, the constructs span different levels (enterprise, respondents, and managers), and snowball sampling limits the sample's representativeness.

Future studies could extend this research by conducting comparative analyses across diverse cultural and economic contexts to explore how imitation strategies and managerial skills operate under different environmental conditions. Mixed-method approaches that combine quantitative surveys with qualitative case studies are also recommended to deepen understanding of how creativity and imitation jointly foster SINV. Finally, future research should consider the impact of emerging technologies, such as artificial intelligence and digital design tools, on creative processes and the advancement of SINV and entrepreneurship in the fashion industry. Further research could also examine the economic, social, environmental and strategic dimensions of sustainable innovation separately, using larger and more diverse samples.

Author Contributions: Conceptualisation, P.T. and M.K.; methodology, P.T.; software, P.T.; validation, P.T. and M.K.; formal analysis, P.T.; investigation, P.T.; resources, M.K.; data curation, P.T.; writing-original draft preparation, P.T.; writing-review and editing, M.K. and E.P.; visualisation, P.T.; supervision, M.K. and E.P.; project administration, E.P.; funding acquisition, E.P. and M.K. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding. The Article Processing Charge (APC) for this publication was funded through the (internal) Special Account for Research Funds (ELKE) of International Hellenic University (IHU), under Research Project 82517.

Institutional Review Board Statement: Ethical review and approval were waived from examination for this study, as per document No. 247/2026 of the Research Ethics and Deontology Committee of the International Hellenic University, which was established and operates according to the provisions of Articles 21-27 of Law 4521/2018, due to its completion. The study was non-interventional, participation was completely anonymous, and no sensitive personal data or vulnerable groups were involved.

Informed Consent Statement: Informed consent was obtained from all participants through their voluntary participation and completion of the questionnaire.

Data Availability Statement: The datasets presented in this article are subject to confidentiality restrictions agreed upon with the participating companies. Requests to access the datasets may be directed to the corresponding author, subject to permission from the companies involved.

Conflicts of Interest: The authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

MS	Managerial Skills
CR	Creativity
SINV	Sustainable Innovation
TBI	Trait-Based Imitation
OBI	Outcome-Based Imitation
GDP	Gross Domestic Product
FBI	Frequency-Based Imitation

Appendix A

Table A1. Item distributions and response-style indices (N = 175).

Item	M	SD	Skew	Kurtosis	% 1	% 2	% 3	% 4	% 5
SINV_1	3.92	0.55	−0.25	0.81	0.0	0.6	17.7	70.9	10.9
SINV_2	3.95	0.58	−0.51	1.48	0.0	1.7	14.3	70.9	13.1
SINV_3	3.94	0.67	−0.86	2.38	0.6	2.3	14.9	66.9	15.4
SINV_4	3.92	0.70	−1.00	2.85	1.1	1.7	16.6	65.1	15.4
OBI_1	3.95	0.61	−2.71	11.70	2.3	1.1	4.0	84.6	8.0
OBI_2	3.92	0.59	−2.80	12.28	2.3	0.6	6.3	84.6	6.3
OBI_3	3.98	0.56	−2.00	9.88	1.1	1.1	6.3	81.7	9.7
OBI_4	3.96	0.48	−2.23	11.77	0.6	1.7	5.1	86.3	6.3
OBI_5	3.94	0.58	−2.12	8.78	1.1	2.3	6.3	82.3	8.0
TBI_1	3.97	0.48	−2.29	12.48	0.6	1.7	4.6	86.9	6.3
TBI_2	3.94	0.44	−1.51	6.95	0.0	1.7	7.4	85.7	5.1
TBI_3	3.90	0.47	−2.34	10.82	0.6	1.1	9.7	85.1	3.4
TBI_4	3.95	0.53	−2.29	11.48	1.1	1.1	6.3	84.0	7.4
TBI_5	3.93	0.45	−2.18	8.95	0.0	2.9	5.1	88.0	4.0
CR_1	3.95	0.48	−1.71	9.95	0.6	0.6	8.6	83.4	6.9
CR_2	3.98	0.50	−1.71	9.79	0.6	1.1	6.3	83.4	8.6
CR_3	3.90	0.53	−1.76	7.18	0.6	1.7	10.9	81.1	5.7
CR_4	3.88	0.54	−2.51	10.29	1.1	1.7	9.1	84.0	4.0
CR_5	3.94	0.44	−2.25	13.10	0.6	0.6	8.0	86.3	4.6

Table A1. *Cont.*

Item	M	SD	Skew	Kurtosis	% 1	% 2	% 3	% 4	% 5
MS_1	3.97	0.48	−1.67	10.04	0.6	0.6	8.0	83.4	7.4
MS_2	3.93	0.55	−2.35	10.50	1.1	1.7	6.9	84.0	6.3
MS_3	3.89	0.40	−2.00	6.38	0.0	1.1	10.9	86.3	1.7
MS_4	3.93	0.47	−1.49	5.93	0.0	2.3	8.0	84.0	5.7
MS_5	3.97	0.47	−1.47	6.95	0.0	2.3	5.7	85.1	6.9

Response-style index	Value
Share of all item responses = 4 (%)	81.83
Share of responses 4 or 5 (%)	89.21
Share of responses 1 or 5 (%)	8.07
Share of midpoint responses (%)	8.62
Respondents answering 4 to ≥20 of 24 items (n)	117
Respondents with identical answers to all 24 items (n)	7
Mean within-person SD across the 24 items	0.39

Note: Responses scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaire contained no reverse-keyed items, so acquiescence cannot be separated from substantive agreement.

Table A2. Results by educational background.

Panel A. Descriptives and internal consistency						
Construct	M (design)	SD (design)	α (design)	M (other)	SD (other)	α (other)
SINV	4.06	0.24	−0.24	3.42	0.48	0.49
OBI	4.04	0.19	0.29	3.56	0.86	0.94
TBI	4.01	0.19	0.44	3.63	0.63	0.91
CR	4.00	0.20	0.33	3.64	0.58	0.84
MS	4.00	0.21	0.43	3.68	0.56	0.85
Panel B. Model 2 estimated within each group (HC3 standard errors)						
Predictor	B (design)	SE	*p*	B (other)	SE	*p*
OBI	0.204	0.218	0.350	0.202	0.206	0.337
TBI	0.306	0.253	0.230	0.199	0.256	0.446
CR	0.319	0.122	0.010	0.238	0.454	0.605
MS	0.172	0.192	0.373	0.177	0.367	0.634
n / R^2		141/0.412			34/0.892	

Note: Design = artistic/design educational background (n = 141); other = no such background (n = 34). Models include gender, age, number of employees and work experience. Coefficients in the small "other" group (n = 34) are imprecise.

Table A3. Model 2 after excluding influential observations (Cook's D > 4/n).

Predictor	B	SE (HC3)	*p*
OBI	0.156	0.155	0.317
TBI	0.398	0.086	<0.001
CR	0.299	0.086	<0.001
MS	0.348	0.085	<0.001
n/R^2		163/0.716	

Note: Twelve observations with Cook's D > 4/n were excluded. The model includes all control variables.

Table A4. Item-level measurement results.

Item	Std. CFA Loading	SE	Corrected Item–Total r	α If Item Deleted
SINV_1	–	–	0.186	0.485
SINV_2	–	–	0.289	0.401
SINV_3	–	–	0.299	0.389
SINV_4	–	–	0.342	0.343
OBI_1	0.828	0.062	0.726	0.817
OBI_2	0.819	0.065	0.748	0.811
OBI_3	0.663	0.098	0.616	0.845
OBI_4	0.743	0.072	0.690	0.830
OBI_5	0.667	0.115	0.619	0.845
TBI_1	0.609	0.097	0.515	0.803
TBI_2	0.596	0.111	0.538	0.795
TBI_3	0.714	0.095	0.632	0.768
TBI_4	0.763	0.074	0.681	0.752
TBI_5	0.743	0.071	0.653	0.762
CR_1	0.580	0.154	0.504	0.669
CR_2	0.625	0.091	0.490	0.674
CR_3	0.660	0.105	0.557	0.645
CR_4	0.568	0.132	0.450	0.692
CR_5	0.507	0.155	0.418	0.700
MS_1	0.558	0.141	0.456	0.700
MS_2	0.654	0.103	0.534	0.671
MS_3	0.585	0.117	0.496	0.689
MS_4	0.495	0.112	0.435	0.708
MS_5	0.694	0.083	0.562	0.660

Note: Loadings from the measurement model with four reflective factors and the SINV composite index (robust ML); all loadings $p \leq 0.001$. SINV indicators are not modelled as reflective items; their item–total statistics are provided for informational purposes.

References

1. Todeschini, B.V.; Cortimiglia, M.N.; Callegaro-de-Menezes, D.; Ghezzi, A. Innovative and Sustainable Business Models in the Fashion Industry: Entrepreneurial Drivers, Opportunities, and Challenges. *Bus. Horiz.* **2017**, *60*, 759–770. [CrossRef]
2. Gazzola, P.; Pavione, E.; Pezzetti, R.; Grechi, D. Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender/Generation Quantitative Approach. *Sustainability* **2020**, *12*, 2809. [CrossRef]
3. McKinsey & Company. *The State of Fashion, 2017 Report, Global Fashion Industry Statistics*; Business of Fashion: New York, NY, USA, 2017.
4. Boons, F.; Montalvo, C.; Quist, J.; Wagner, M. Sustainable Innovation, Business Models and Economic Performance: An Overview. *J. Clean. Prod.* **2013**, *45*, 1–8. [CrossRef]
5. Cillo, V.; Petruzzelli, A.M.; Ardito, L.; Del Giudice, M. Understanding Sustainable Innovation: A Systematic Literature Review. *Corp. Soc. Responsib. Environ. Manag.* **2019**, *26*, 1012–1025. [CrossRef]
6. Schuh, G.; Dölle, C. *Sustainable Innovation*; Springer: Berlin/Heidelberg, Germany, 2021.
7. Afeltra, G.; Alerasoul, S.A.; Strozzi, F. The Evolution of Sustainable Innovation: From the Past to the Future. *Eur. J. Innov. Manag.* **2023**, *26*, 386–421. [CrossRef]
8. Flood, C. Ethical Implications of the Fashion Industry. Presented at the Academic Festival, Sacred Heart University, Fairfield, CT, USA, 28 April 2023. Available online: https://digitalcommons.sacredheart.edu/acadfest/2023/all/153/ (accessed on 8 November 2026).
9. Ikram, M. Transition toward Green Economy: Technological Innovation's Role in the Fashion Industry. *Curr. Opin. Green Sustain. Chem.* **2022**, *37*, 100657. [CrossRef]
10. Herbst, H. The Price of Fashion: The Environmental Cost of the Textile Industry in China. *Fordham Int'l LJ* **2021**, *45*, 907.
11. Statista Research Department Leading Importing Countries of Apparel Worldwide by Value in 2024. Available online: https://www.statista.com/statistics/1198349/apparel-leading-importers-worldwide-by-value/ (accessed on 10 April 2025).
12. Zhang, D.; Di Benedetto, C.A. Radical Fashion and Radical Fashion Innovation. *J. Glob. Fash. Mark.* **2010**, *1*, 195–205. [CrossRef]
13. Loschek, I. *When Clothes Become Fashion: Design and Innovation Systems*; Berg: New York, NY, USA, 2009.

14. Brydges, T.; Lavanga, M.; von Gunten, L. Entrepreneurship in the Fashion Industry: A Case Study of Slow Fashion Businesses. In *Beyond Frames: Dynamics Between the Creative Industries, Knowledge Institutions and the Urban Context*; Schramme, A., Hagoort, G., Kooyman, R., Eds.; Eburon: Delft, The Netherlands, 2014; pp. 73–79.
15. Anand, S. Confessions of The Fashion Industry: The Piracy Paradox. *IJRAR–Int. J. Res. Anal. Rev. IJRAR* **2024**, *11*, 74–119.
16. Wild, B. Imitation in Fashion: Further Reflections on the Work of Thorstein Veblen and Georg Simmel, Fashion. *Style Pop. Cult.* **2016**, *3*, 281–294. [CrossRef]
17. Calíope, T.S.; da Silva Filho, J.C.L. Imitation and Innovation in Fashion: Mapping the Creative Process in "Modinha" Segment on a Regional Fair. *Int. J. Innov.* **2016**, *4*, 119–139.
18. Caulkins, J.P.; Hartl, R.F.; Kort, P.M.; Feichtinger, G. Explaining Fashion Cycles: Imitators Chasing Innovators in Product Space. *J. Econ. Dyn. Control* **2007**, *31*, 1535–1556. [CrossRef]
19. Ünay, F.G.; Zehir, C. Innovation Intelligence and Entrepreneurship in the Fashion Industry. *Procedia-Soc. Behav. Sci.* **2012**, *41*, 315–321. [CrossRef]
20. Kawamura, Y. *Fashion-Ology: An Introduction to Fashion Studies*; Bloomsbury Publishing: New York, NY, USA, 2018.
21. Ruppert-Stroescu, M.; Hawley, J.M. A Typology of Creativity in Fashion Design and Development. *Fash. Pract.* **2014**, *6*, 9–35. [CrossRef]
22. Maia, C.; dos Santos, I.C.; Gaspar, M.A. Managerial Skills Required by Innovative and Technology-Based Firms. *Lat. Am. J. Bus. Manag.* **2016**, *6*, 3. Available online: https://www.lajbm.com.br/journal/article/view/289 (accessed on 8 November 2026).
23. Švač, V.; Cagáňová, D. Managerial Skills for Innovation Support. *Mob. Netw. Appl.* **2020**, *25*, 925–931. [CrossRef]
24. Kozlowski, A.; Searcy, C.; Bardecki, M. Innovation for a Sustainable Fashion Industry: A Design Focused Approach toward the Development of New Business Models. *Green Fash.* **2016**, *2*, 151–169. [CrossRef]
25. Tarayevska, L.S.; Rishchuk, L.I. Environmental Startup in Fashion Industry. *Actual Probl. Reg. Econ. Dev.* **2021**, *2*, 273–281. [CrossRef]
26. Tsolakidis, P.; Mylonas, N.; Petridou, E. The Impact of Imitation Strategies, Managerial and Entrepreneurial Skills on Startups' Entrepreneurial Innovation. *Economies* **2020**, *8*, 81. [CrossRef]
27. Enterprise Europe Network EcoFashionEU: Sustainable Fashion in Greece with the Enterprise Europe Network. Available online: https://www.een.gr/en/news/ecofashioneu-sustainable-fashion-greece-enterprise-europe-network (accessed on 8 November 2026).
28. Zartha, J.; Orozco, G.; Barreto, D.; García, D. Sustainable Innovation in Organizations: A Look from Processes, Products, and Services. *Sustainability* **2024**, *16*, 2503. [CrossRef]
29. Lopes, J.M.; Gomes, S.; Pacheco, R.; Monteiro, E.; Santos, C. Drivers of Sustainable Innovation Strategies for Increased Competition among Companies. *Sustainability* **2022**, *14*, 5471. [CrossRef]
30. Marin-Garcia, A.; Gil-Saura, I.; Ruiz-Molina, M.E.; Moise, M.S. Effects of the Industry Format on Sustainability-Oriented Service Innovation, Relationship Value, and Firm Performance. *Serv. Bus.* **2025**, *19*, 11. [CrossRef]
31. Bertola, P.; Vacca, F.; Colombi, C.; Iannilli, V.M.; Augello, M. The Cultural Dimension of Design Driven Innovation, A Perspective from the Fashion Industry. *Des. J.* **2016**, *19*, 237–251. [CrossRef]
32. Casciani, D.; Chkanikova, O.; Pal, R. Exploring the Nature of Digital Transformation in the Fashion Industry: Opportunities for Supply Chains, Business Models, and Sustainability-Oriented Innovations. *Sustain. Sci. Pract. Policy* **2022**, *18*, 773–795. [CrossRef]
33. Papahristou, E.; Bilalis, N. Should the Fashion Industry Confront the Sustainability Challenge with 3D Prototyping Technology. *Int. J. Sustain. Eng.* **2017**, *10*, 207–214. [CrossRef]
34. Huynh, P.H. Enabling Circular Business Models in the Fashion Industry: The Role of Digital Innovation. *Int. J. Product. Perform. Manag.* **2021**, *71*, 870–895. [CrossRef]
35. Ostermann, C.M.; Nascimento, L.D.S.; Zen, A.C. Business Model Innovation for Circular Economy in Fashion Industry: A Startups' Perspective. *Front. Sustain.* **2021**, *2*, 766614. [CrossRef]
36. Wijdeveld, D.C. How Fashion Startups Build Strong Brands: Exploring Industry-Specific Factors Most Influential When Branding Fashion Startups. Bachelor's Thesis, University of Twente, Enschede, The Netherlands, 2018.
37. Jia, F.; Yin, S.; Chen, L.; Chen, X. The Circular Economy in the Textile and Apparel Industry: A Systematic Literature Review. *J. Clean. Prod.* **2020**, *259*, 120728. [CrossRef]
38. John, E.P.; Mishra, U. A Sustainable Three-Layer Circular Economic Model with Controllable Waste, Emission, and Wastewater from the Textile and Fashion Industry. *J. Clean. Prod.* **2023**, *388*, 135642. [CrossRef]
39. Koszewska, M. Circular Economy-Challenges for the Textile and Clothing Industry. *Autex Res. J.* **2018**, *18*, 337–347. [CrossRef]
40. Marques, A.D.; Marques, A.; Ferreira, F. Homo Sustentabilis: Circular Economy and New Business Models in Fashion Industry. *SN Appl. Sci.* **2020**, *2*, 306. [CrossRef]
41. Colucci, M.; Vecchi, A. Close the Loop: Evidence on the Implementation of the Circular Economy from the Italian Fashion Industry. *Bus. Strategy Environ.* **2021**, *30*, 856–873. [CrossRef]
42. Schnaars, S.P. *Managing Imitation Strategies*; Simon and Schuster: New York, NY, USA, 2002.

43. DiMaggio, P.J.; Powell, W.W. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *Am. Sociol. Rev.* **1983**, *48*, 147–160. [CrossRef]
44. Haunschild, P.R.; Miner, A.S. Modes of Interorganizational Imitation: The Effects of Outcome Salience and Uncertainty. *Adm. Sci. Q.* **1997**, *42*, 472–500. [CrossRef]
45. Lieberman, M.B.; Asaba, S. Why Do Firms Imitate Each Other? *Acad. Manag. Rev.* **2006**, *31*, 366–385. [CrossRef]
46. Enkel, E.; Gassmann, O. Creative Imitation: Exploring the Case of Cross -Industry Innovation. *R&D Manag.* **2010**, *40*, 256–270. [CrossRef]
47. Wang, L.; Wu, B.; Pechmann, C.; Wang, Y. The Performance Effects of Creative Imitation on Original Products: Evidence from Lab and Field Experiments. *Strateg. Manag. J.* **2023**, *44*, 171–196. [CrossRef]
48. Aarstad, J.; Ness, H.; Haugland, S.A.; Kvitastein, O.A. Imitation Strategies and Interfirm Networks in the Tourism Industry: A Structure–Agency Approach. *J. Destin. Mark. Manag.* **2018**, *9*, 166–174. [CrossRef]
49. Dewey, M. The Creative Copy: Agency and Fashion at a Market for Counterfeited Garments. In *Piracy and Intellectual Property in Latin America*; Routledge: London, UK, 2020; pp. 191–206.
50. Maldini, I.; Manz, R.L. From "Things of Imitation" to "Devices of Differentiation": Uncovering a Paradoxical History of Clothing (1950–2015). *Fash. Theory* **2018**, *22*, 69–84. [CrossRef]
51. Enkel, E.; Mezger, F. Imitation Processes and Their Application for Business Model Innovation: An Explorative Study. *Int. J. Innov. Manag.* **2013**, *17*, 1340005. [CrossRef]
52. Vogel, A.T.; Watchravesringkan, K. Consumer Evaluations of Trend Imitation: Brand Equity, Consumer Attitudes and Preference. *J. Prod. Brand Manag.* **2017**, *26*, 516–527. [CrossRef]
53. Shalley, C.E.; Zhou, J.; Oldham, G.R. The Effects of Personal and Contextual Characteristics on Creativity: Where Should We Go from Here? *J. Manag.* **2004**, *30*, 933–958. [CrossRef]
54. Sternberg, R.J.; Tardif, T. The Nature of Creativity. *Essent. Sternberg Essays Intell. Psychol. Educ.* **2009**, *18*, 103–118.
55. Anderson, N.; Potočnik, K.; Zhou, J. Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *J. Manag.* **2014**, *40*, 1297–1333.
56. Sinha, P. Creativity in Fashion. *J. Text. Appar. Technol. Manag.* **2002**, *2*, 1–16.
57. Kabukcu, E. Creativity Process in Innovation Oriented Entrepreneurship: The Case of Vakko. *Procedia-Soc. Behav. Sci.* **2015**, *195*, 1321–1329. [CrossRef]
58. Rufaidah, P. Entrepreneurial Orientation of SMEs in the Creative Fashion Industry. *J. Glob. Bus. Adv.* **2019**, *12*, 254–275. [CrossRef]
59. Montagna, G.; Pereira, C.C.; Marques, A.A. Creativity and Sustainability. In *Creating Through Mind and Emotions*; CRC Press: Boca Raton, FL, USA, 2022; pp. 319–325.
60. Asghar, N.; Khattak, A.; Danish, M.H.; Bokhari, I.H.; Waris, M. Managerial Skills, Technology Adaptation and Firm Performance: Mediating Role of Process Innovation and Product Innovation. *Cogent Bus. Manag.* **2023**, *10*, 2281485. [CrossRef]
61. Abbas, J.; Zhang, Q.; Hussain, I.; Akram, S.; Afaq, A.; Shad, M.A. Sustainable Innovation in Small Medium Enterprises: The Impact of Knowledge Management on Organizational Innovation through a Mediation Analysis by Using SEM Approach. *Sustainability* **2020**, *12*, 2407. [CrossRef]
62. Whetten, D.A.; Cameron, K.S. *Developing Management Skills*; Pearson: Upper Saddle River, NJ, USA, 2011.
63. Álvarez Contreras, D.E.; Padilla, J.M.; Martínez, C.O. Management Skills as a Factor of Business Competitiveness. *Regino Científica* **2023**, *2*, 2023109. [CrossRef]
64. Scullen, S.E.; Mount, M.K.; Judge, T.A. Evidence of the Construct Validity of Developmental Ratings of Managerial Performance. *J. Appl. Psychol.* **2003**, *88*, 50. [CrossRef]
65. Asiedu, M.A. Dynamic Managerial Capabilities and New Product Development in the Fashion and Apparel Design Industry. *Educ. J.* **2023**, *12*, 191–200. [CrossRef]
66. Fernandes, C.E. Fashion Design Entrepreneurship: Skills and Solutions to Create a Fashion Business. *J. Text. Sci. Fash. Technol.* **2019**, *3*, 1–10. [CrossRef]
67. Nayak, R.; Thang, L.N.V.; Nguyen, T.; Gaimster, J.; Morris, R.; George, M. Sustainable Developments and Corporate Social Responsibility in Vietnamese Fashion Enterprises. *J. Fash. Mark. Manag. Int. J.* **2022**, *26*, 307–327. [CrossRef]
68. Lang, C.; Liu, C. Fashion Entrepreneurial Self-Efficacy: Development and Validation of a Domain-Specific Scale. *J. Fash. Mark. Manag. Int. J.* **2023**, *27*, 118–137. [CrossRef]
69. Bryl, M.; Sabadin, O. Features of Training a Modern Fashion Business Manager. *Socio-Cult. Manag. J.* **2023**, *6*, 86–109. [CrossRef]
70. Karpova, E.; Marcketti, S.; Kamm, C. Fashion Industry Professionals' Viewpoints on Creative Traits and, Strategies for Creativity Development. *Think. Ski. Creat.* **2013**, *10*, 159–167. [CrossRef]
71. Schwarz, J.O. Strategy Orientation in the Fashion Industry: Short-or Long-Term? *J. Futur. Stud.* **2019**, *24*, 77–90.
72. Tian, B.; Hu, S. The Application of Creative Design in Apparel Industry. *Art Des. Rev.* **2016**, *4*, 15–19.
73. Malik, R.K.; Zaheer, N. Imitative Behavior of Women in the Selection of Clothing. *J. Basic Appl. Sci. Res.* **2013**, *3*, 429–439.

74. Fombrun, C.; Shanley, M. What's in a Name? Reputation Building and Corporate Strategy. *Acad. Manag. J.* **1990**, *33*, 233–258. [CrossRef]
75. Posen, H.E.; Ross, J.M.; Wu, B.; Benigni, S.; Cao, Z. Reconceptualizing Imitation: Implications for Dynamic Capabilities, Innovation, and Competitive Advantage. *Acad. Manag. Ann.* **2023**, *17*, 74–112. [CrossRef]
76. Pérez-Luño, A.; Valle Cabrera, R.; Wiklund, J. Innovation and Imitation as Sources of Sustainable Competitive Advantage. *Manag. Res. J. Iberoam. Acad. Manag.* **2007**, *5*, 71–82. [CrossRef]
77. Niinimäki, K. Ethical Foundations in Sustainable Fashion. *Text. Cloth. Sustain.* **2015**, *1*, 3, Erratum in *Text. Cloth. Sustain.* **2015**, *1*, 4. [CrossRef]
78. Godart, F. The Power Structure of the Fashion Industry: Fashion Capitals, Globalization and Creativity. *Int. J. Fash. Stud.* **2014**, *1*, 39–55. [CrossRef]
79. Abdikayeva, A.K.; Dalnova, I.A. The Future of the Fashion Industry: Integration of Technology and Creativity in the Educational Process. *ATU Des. Sci.* **2025**, *2*, 18–26. [CrossRef]
80. Goworek, H.; Oxborrow, L.; McLaren, A.; Claxton, S.; Cooper, T.; Hill, H. Creativity at Work and Sustainable Product Development: Practitioner Perspectives from the Clothing Industry. *Palgrave Handb. Creat. Work* **2018**, 563–582. [CrossRef]
81. Laužikas, M.; Mokšeckienė, R. The Role of Creativity in Sustainable Business. *Entrep. Sustain. Issues* **2013**, *1*, 10–22. [CrossRef]
82. Ruppert-Stroescu, M.; LeHew, M.L.; Connell, K.Y.H.; Armstrong, C.M. Creativity and Sustainable Fashion Apparel Consumption: The Fashion Detox. *Cloth. Text. Res. J.* **2015**, *33*, 167–182. [CrossRef]
83. Goworek, H.; Bailey, F. *Creativity and Innovation in the Fashion Business: Contemporary Issues in Fashion Design and Product Development*; Routledge: London, UK, 2024. [CrossRef]
84. Hosseini, E.; Tajpour, M.; Lashkarbooluki, M. The Impact of Entrepreneurial Skills on Manager's Job Performance. *Int. J. Hum. Cap. Urban Manag.* **2020**, *5*, 361–372. [CrossRef]
85. Papulová, Z.; Mokroš, M. Importance of Managerial Skills and Knowledge in Management for Small Entrepreneurs. *E-Leader Prague* **2007**, *1*, 1–8.
86. Zahra, A.; Fakhrisadat, N.; Narges, I. Explaining the Role of Managerial Skills of Entrepreneurship in Business Success. *Int. J. Manag. Sci.* **2014**, *4*, 42–52.
87. Dragan, I.M.; Isaic-Maniu, A. Snowball Sampling Completion. *J. Stud. Soc. Sci.* **2013**, *5*, 160–177. [CrossRef]
88. Croasmun, J.T.; Ostrom, L. Using Likert-Type Scales in the Social Sciences. *J. Adult Educ.* **2011**, *40*, 19–22.
89. Joshi, A.; Kale, S.; Chandel, S.; Pal, D.K. Likert Scale: Explored and Explained. *Br. J. Appl. Sci. Technol.* **2015**, *7*, 396. [CrossRef]
90. Baxter, D.; Chipulu, M. Developing a New Scale for Measuring Sustainability-Oriented Innovation. *J. Clean. Prod.* **2023**, *429*, 139590. [CrossRef]
91. Gunarathne, N. Sustainable Innovation Measurement: Approaches and Challenges. In *Innovation for Sustainability: Business Transformations Towards a Better World*; Springer: Cham, Switzerland, 2019; pp. 233–251.
92. Muñoz-Pascual, L.; Galende, J.; Curado, C. Contributions to Sustainability in SMEs: Human Resources, Sustainable Product Innovation Performance and the Mediating Role of Employee Creativity. *Sustainability* **2021**, *13*, 2008. [CrossRef]
93. Guo, H.; Zhao, J.; Tang, J. The Role of Top Managers' Human and Social Capital in Business Model Innovation. *Chin. Manag. Stud.* **2013**, *7*, 447–469. [CrossRef]
94. Ruiz-Jiménez, J.M.; Fuentes-Fuentes, M.D.M. Management Capabilities, Innovation, and Gender Diversity in the Top Management Team: An Empirical Analysis in Technology-Based SMEs. *BRQ Bus. Res. Q.* **2016**, *19*, 107–121. [CrossRef]
95. Kumar, N.; Stern, L.W.; Anderson, J.C. Conducting interorganizational research using key informants. *Acad. Manag. J.* **1993**, *36*, 1633–1651. [CrossRef]
96. Brislin, R.W. Back-Translation for Cross-Cultural Research. *J. Cross-Cult. Psychol.* **1970**, *1*, 185–216. [CrossRef]
97. R Core Team. *R: A Language and Environment for Statistical Computing*; R Foundation for Statistical Computing: Vienna, Austria, 2024.
98. Rosseel, Y. Lavaan: An *R* Package for Structural Equation Modeling. *J. Stat. Soft.* **2012**, *48*, 1–36. [CrossRef]
99. Jorgensen, T.D.; Pornprasertmanit, S.; Schoemann, A.M.; Rosseel, Y. *semTools: Useful Tools for Structural Equation Modeling*, R package version 0.5-6; Comprehensive R Archive Network (CRAN): Vienna, Austria, 2022.
100. Zeileis, A. Econometric Computing with HC and HAC Covariance Matrix Estimators. *J. Stat. Soft.* **2004**, *11*, 1–17. [CrossRef]
101. Diamantopoulos, A.; Winklhofer, H.M. Index Construction with Formative Indicators: An Alternative to Scale Development. *J. Mark. Res.* **2001**, *38*, 269–277. [CrossRef]
102. Jarvis, C.B.; MacKenzie, S.B.; Podsakoff, P.M. A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *J. Consum. Res.* **2003**, *30*, 199–218. [CrossRef]
103. Clark, L.A.; Watson, D. Constructing Validity: Basic Issues in Objective Scale Development. *Psychol. Assess.* **1995**, *7*, 309–319. [CrossRef]
104. Henseler, J.; Ringle, C.M.; Sarstedt, M. A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [CrossRef]

105. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.-Y.; Podsakoff, N.P. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903. [CrossRef]
106. Kock, N. Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach. *Int. J. e-Collab.* **2015**, *11*, 1–10. [CrossRef]
107. Drezner, Z.; Turel, O.; Zerom, D. A Modified Kolmogorov–Smirnov Test for Normality. *Commun. Stat.-Simul. Comput.* **2010**, *39*, 693–704. [CrossRef]
108. Razali, N.M.; Wah, Y.B. Power Comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling Tests. *J. Stat. Model. Anal.* **2011**, *2*, 21–33.
109. Senaviratna, N.A.M.R.; Cooray, T.M.J.A. Diagnosing Multicollinearity of Logistic Regression Model. *Asian J. Probab. Stat.* **2019**, *5*, 1–9. [CrossRef]
110. Hayes, A.F.; Cai, L. Using Heteroskedasticity-Consistent Standard Error Estimators in OLS Regression: An Introduction and Software Implementation. *Behav. Res. Methods* **2007**, *39*, 709–722. [CrossRef]
111. Johnson, J.W. A Heuristic Method for Estimating the Relative Weight of Predictor Variables in Multiple Regression. *Multivar. Behav. Res.* **2000**, *35*, 1–19. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.