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## Article

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# Internalizing Inspirations: How Future Entrepreneurs Absorb Role Models in Sustainable Entrepreneurial Ecosystems

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## Abstract

This study aims to explore the interaction of entrepreneurs with role models and role models' narratives (influential individuals, well-known ventures, stories, etc.) in the context of sustainability orientation. While some entrepreneurs are engaged in sustainability-oriented actions, others are not. Keeping in mind that role models can influence entrepreneurs' perceptions, action orientation, and values, there is a significant lack of clarity on how role models interact with entrepreneurs in terms of influencing sustainable-oriented business activities. Hence, this paper examines the nature and dynamic of these interactions in the context of entrepreneurial ecosystems by applying systematic inductive qualitative research methods and choosing the Estonian entrepreneurial ecosystem (EE) as a context. This study contributes into ongoing EE research by providing a better understanding of how supportive environments of EE and entrepreneurs' exposure to a variety of role models can foster sustainable entrepreneurial practices; expands understanding of Social Learning Theory in a sense of including "negative" role models and their influence by exploring how they can catalyze opposite behaviors, prompting entrepreneurs to reject unsustainable practices and adopt more ethical and environmentally friendly approaches

## Keywords

Sustainable Entrepreneurship, Entrepreneurial role models, Sustainable entrepreneurial role models, Entrepreneurial ecosystems, Sustainable entrepreneurial ecosystems

## JEL Classification

L26, Q56, M14, D91, O35, L31

## Introduction

In modern society, the need for more sustainable behaviors becomes obvious. Entrepreneurship is central in transitioning towards a more sustainable future, whereas aligning the social, economic, and ecological objectives and ecological entrepreneurs plays a role (Rosario et al., 2022). Sustainable entrepreneurship, where founders and managers are thinking not exclusively about pursuing economic gains but also of preserving nature and community (Shepherd and Patzelt, 2011) is getting more attention from policymakers, the research community and practitioners. Promoting more sustainable-oriented behaviour among startups and other ventures is becoming common for many entrepreneurial ecosystems. However, their amount is growing lower than expected, and some use "greenwashing" approach while lacking a real change in values and behaviours (Huang, 2020). The research community is exploring sustainable entrepreneurship from the institutional, multilayered level, commonly associated with the domain of entrepreneurial ecosystems, and from the individual level of entrepreneurs and managers. This study is putting the entrepreneurs as individuals into the center of attention, their sustainably orientation, values, and actions; however, we also use the domain of sustainable entrepreneurial ecosystems as a part of the context where these entrepreneurs grow, learn, mature, and run their ventures. That approach helps us to provide a more dynamic view of the problem.

Role models represent a fundamental psychological concept, that was borrowed and actualized by the entrepreneurship field. Entrepreneurship role model(s) – further ERM(s) are, in turn, relatively well studied and research on ERM has noticeably increased over the past several years. Previous studies have proven that entrepreneurial intentions and behaviors can be affected by exposure to role models, even though this effect depends on by whom, when and in which context the exposure to role models occurs (Abbasianchavari, Moritz, 2020). Keeping in mind that individual differences in the set of values, beliefs and orientations can foster or hinder sustainability-oriented actions across organizations (Jahanshahi, Brem, 2017) and that individuals' economic,

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social and environmental values influence their propensity to engage in a broad range of sustainability-related corporate actions (Marcus, MacDonald, 2015), this study is aiming to explore ERMs, their interaction with entrepreneur's sustainable values and orientations, leading to sustainable-oriented actions, and a (sustainable) entrepreneurial ecosystem as a contextual narrative. It is important to note, that the most investigated dependent outcome in ERM research so far has been entrepreneurial intentions (Abbasiachavari, Moritz, 2020): most of the scholars have been focusing on how exposure to ERM influences the individual intention to become an entrepreneur and not on the process of shaping sustainable individual orientation, which reveals a significant research gap this study aims to fill. Furthermore, Vuorio et. al., (2018) claim that "providing positive images about entrepreneurship and utilizing role models that provide positive experiences could be a way to improve the level of sustainability-oriented entrepreneurial intentions", which contributes to understanding the potential importance of this lack of knowledge. Moreover, this study applies a rather broad understanding of ERM: besides most commonly understanding of ERM as a person (educator, mentor, family member, etc.), the author expands the understanding of ERM beyond just "an individual" to other successful ventures and stories about entrepreneurs, combining different understandings of ERM from studies on entrepreneurial role models, previously being rather fragmented in this sense.

This study contributes into ongoing EE research by providing a better understanding of how supportive environments of EE and entrepreneurs' exposure to a variety of role models can foster sustainable entrepreneurial practices; expands understanding of Social Learning Theory in a sense of including "negative" role models and their influence by exploring how they can catalyze opposite behaviors, prompting entrepreneurs to reject unsustainable practices and adopt more ethical and environmentally friendly approaches; highlights the importance of different EE elements and their interaction to be actualized as potentially fostering or hindering sustainable development; draws the avenue for future research paths. This study aims to answer the following research question: How do entrepreneurs interact with ERMs, and how ERMs influence sustainable-oriented values, orientations, and actions of entrepreneurs through these interactions within a (sustainable) entrepreneurial ecosystem? Empirically, this study selected the Estonian entrepreneurial ecosystem as a research setting and conducted qualitative studies with startup founders, who founded or co-founded sustainable ventures in Estonia and are still involved in managing these companies on the moment of conducting the interview. The findings revealed that interviewees did have sustainable oriented values and intentions, which were expressed in various sustainable actions while founding and managing their ventures, and that exposure to different ERMs was influencing in regards these values, intentions, and actions, even in very different ways. This study is structured as follows. First, the author provides a conceptual background on ERMs and (sustainable) entrepreneurial ecosystems. This is followed by discussions of the methodological approach selected for this research inquiry. Finally, the author presents the research findings and explains the necessity of further research.

## Literature Review

### ***Entrepreneurship role models (ERMs): individuals, ventures, and narratives***

Bosma et al. (2012) define entrepreneurial role models as **individuals** who significantly influence the entrepreneurial intentions and actions of others. These role models, by Bosma et al. (2011), are typically more experienced entrepreneurs who provide a behavioral template that can be observed and emulated by nascent entrepreneurs. This influence can manifest through direct interaction or through the broader social and professional exposure of the role model's success and practices. Other scholars have elaborated these "individuals" from just experienced entrepreneurs to (1) self-employed family members (Morales-Alonso et.al, 2016), (2) similar models and peers, mostly in terms of gender, sector and nationality (Bosma et al., 2012) and mostly in cases of school peers and coworkers (Falck, 2012, Kacperczyk, 2013), (3) educators and mentors (Diegoli, 2018, Eesley, 2017), mostly with entrepreneurial experience. In other words, ERMs, in their most traditional understanding, are individuals from the inner circle who have entrepreneurial experience, whether successful or not. It is interesting to mention that exposure to unsuccessful entrepreneurial role models nevertheless may increase entrepreneurial intentions (Chen, 2016).

Keeping the variety of ERMs in mind, it is important to understand their functions and how they interact with aspirants (those who consider them as role models). Gibson (2004) summarizes different functions that role models may fulfil and claims that the importance of role models lies in three interrelated functions: "to provide learning, to provide motivation and inspiration and to help individuals define their self-concept". Bosma et. al (2012) formulates it somewhat differently and add a support function to this list: "entrepreneurial role models may perform four interrelated functions: (i), inspiration and motivation (i.e. the role model creates awareness and motivates people to get started), (ii) increasing self-efficacy (i.e. the role model makes people confident that they too can achieve a certain goal), (iii) learning by example (i.e. the role model provides guidelines for action), and (iv) learning by support (i.e. the role model provides hands-on support or advice).

However, many researchers on ERMs highlight that even though ERMs are often individuals, they do not necessarily have to be from the inner circle of the role model aspirant. "Many **entrepreneurs** claim that their business startup decision and the development of their business have been influenced by others. These 'others'

are often entrepreneurs and may range from famous people such as Steve Jobs to former colleagues or family members. Such persons serve as role models." (Bosma et al., 2012). In other words, scholars have found that exposure to ERM, even if it is not physically close to the aspirant (for example, through media, books, or formal studying processes at schools and universities), may still cover ERM's functions. "Exposure to a story about a successful entrepreneur does have an impact on perceptions of entrepreneurship. By incorporating successful, realistic role models in their entrepreneurship curricula in narrative form, educators may change perceptions about entrepreneurship" (Godsey, Sebor, 2009). This case-based study approach is commonly adopted in modern entrepreneurship education by telling stories about famous entrepreneurs like Steve Jobs, Jack Ma, Mark Zuckerberg, etc as examples (Liu, Ma, 2019).

In other words, prior research highlights the role model's influence of entrepreneurial stories on entrepreneurs. It is important to note that ERM's narratives do not exclusively provide spiritual incentives for audiences but also offer behavioural guidance for entrepreneurs (Gibson, 2004; Bosma et al., 2012). This is how role model stories (also referenced in this study as ERM's narratives) may influence entrepreneurial behaviors, which can be insightful in a sense of sustainable behaviors and orientations.

It is not very common in a more traditional approach to consider ventures as entrepreneurial role models. Most of the time, the interaction between role models and aspirants is seen as an interaction between two individuals – either directly or via stories about these individuals, as it was also described in this study. However, there is a relatively narrow research stream that is studying the so-called "**lighthouses**" and their role and influence on other entrepreneurs. Lighthouses are particularly successful startups in the entrepreneurial ecosystem (further – EE) (Tiba et al., 2020), that are the leaders, who "create and shape the various cultural, social, and material factors that make up an EE. Their example helps entrepreneurs to find a route through the dangerous waters of business venturing and to make their startup a success". In other words, they serve as role models by the nature of their function to other ventures in the ecosystem: nascent entrepreneurs might not know the lighthouses' founders, but they know company brand, reputation, and image, and in some cases that might be enough to be perceived as a role model. In this study the author includes them in the definition of ERM.

#### **Role models in broader research**

Role modeling influences what individuals decide to achieve by presenting the accomplishments of other individuals or ventures that they wish to emulate. This, in turn, constructs the goals, skills, motivations, and identities of those who look up to these role models (role model aspirants). Several studies have demonstrated that successful role models inspire imitation by embodying the objectives that others strive to reach (Bell, 1970; Morgenroth, Ryan, & Peters, 2015), such as a preferred educational or career path (Basow & Howe, 1979; Carroll & Mosakowski, 1987; Shin, Levy, & London, 2016). For example, in healthcare, role modeling plays a vital role in helping individuals acquire and refine technical and social skills relevant to the medical profession (Cruess, Cruess, & Steinert, 2008; Passi & Johnson, 2016). Role models can also drive motivation, as seen in higher education, where students are encouraged to work harder, submit assignments timely, and aim for even higher academic achievement (Herrmann et al., 2016). The function of role models is broad and varies depending on the context, however, we can find positive examples of their activities from not only European EEs – for instance, the evidence from Chili, where program members were spread out, connected with other ecosystem stakeholders, and functioned as role models for others in the nascent entrepreneurial ecosystem, claims that local Startup organization "was able to improve the entrepreneurial behaviors of its target group of domestic entrepreneurs by leveraging social interaction with foreign entrepreneurs who had more effective entrepreneurial behaviors to start with" (Harima et al., 2024; Leatherbee and Eesley, 2014). Finally, and most importantly for this research, role modeling can influence personal identity formation, as in the case of medical students and managers who experiment with attributes, values, and beliefs modeled by others to shape their "ideal self" (Pratt, Rockmann, & Kaufmann, 2006; Singh et al., 2006).

#### **(Sustainable) entrepreneurial ecosystems as a context**

Spigel, Stam (2016) define the EE as a set of "cultural, social, and material attributes that interact to generate, shape, and sustain entrepreneurship in a region." This includes networks, investment capital, universities, and support services that can help businesses grow and sustain economic activity. Related to this study, it is worth mentioning that histories of entrepreneurship (referred as ERMs narratives in this study), by (Spigel, Stam, 2016) belong to EE cultural attributes, and role models belong to social attributes of EE (Fig. 1). Moreover, considering the prior knowledge about ERMs as individuals, we can elaborate and expect to find them in universities and supporting services (teachers, mentors), belonging, by (Spigel, Stam, 2016) to material attributes of EE.

In other words, not being articulated exactly directly like that, we can expect to find ERMs on all the levels of ecosystems: cultural, social, and material attributes of it, which represents EE as a "supplier" of ERMs to other entrepreneurs. As claimed by (Theodoraki et al., 2022), the parts of EEs are intimately and fuzzily interconnected and explicable only through consideration of the system as a whole, including spillovers to and consequences for the larger sphere of stakeholders involved. Keeping in mind that EE can promote sustainable entrepreneurship by different elements and interaction between these elements (Huang et al., 2023), it is important to understand the role of elements of EE in this transition to more sustainable EE. Spigel and Stam (2016) claim that "entrepreneur

is the core actor in building and sustaining the ecosystem. While state and other sources might support ecosystem <....>, entrepreneurs retain agency to develop and lead the ecosystem”.

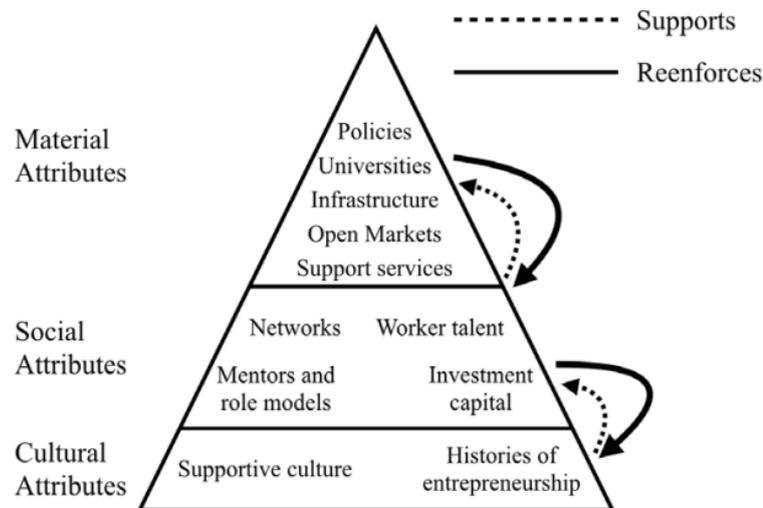


Fig. 1. Relationships between attributes within an entrepreneurial ecosystem (Spigel, 2015).

Bischoff and Volkmann (2018) define a sustainable entrepreneurial ecosystem as “an interconnected and collaborating group of stakeholders providing sustainability-focused support to entrepreneurs in order to foster entrepreneurial activities that simultaneously address the economic, ecological and social dimensions of sustainability and thereby contribute to the transformation to a sustainable regional economy”, connecting the understanding of EE concept with current societal need in more sustainable orientations. Building the theoretical bridge between EE and sustainable EE concepts, it becomes obvious that role models may represent the group of stakeholders providing sustainability-focused support to entrepreneurs especially due to their nature being spread all over the ecosystem layers and attributes. Moreover, prior research has shown that quality education on sustainable development (in a very broad sense of sharing and transferring the knowledge about sustainable entrepreneurship) “plays a crucial role in promoting highly SE, fosters a sustainable spirit, awareness, and competence among entrepreneurs” (Huang et al., 2023).

In other words, the ERMs that are being supplied and are “circulating” in knowledge transfer processes within EE (stories and narratives, local entrepreneurs, and famous “lighthouses” of the local EE) could potentially moderate the link between entrepreneurs and their sustainable orientations, promoting the transition from EE to sustainable EE. This understanding might help to bridge these pillars: ERMs, entrepreneur sustainable orientations and EEs together.

Hence, as claimed by Lafuente et al. (2007), the existence of role models explains different levels of entrepreneurial activity between regions and countries, which highlights the importance of role models within (sustainable) entrepreneurial ecosystems.

## Methodology

### Research design

This study primarily operates within an epistemological framework rather than an ontological one. The focus is on understanding how knowledge about the interaction between entrepreneurial role models (ERMs) and sustainable orientations of entrepreneurs is constructed and interpreted. By employing Social Learning Theory and a qualitative, inductive research method, the study aims to generate insights into the process and contextual meanings rather than asserting fundamental truths about the nature of ERMs themselves. Additionally, this study aligns with critical realism as its philosophical underpinning. Critical realism acknowledges that while there is an objective reality (e.g., the existence of ERMs and their existing or not sustainable orientations), our understanding of it is mediated by social, cultural, and contextual interpretations. The use of qualitative, inductive methods emphasizes uncovering mechanisms and processes—hallmarks of critical realist research. This is evident in the way the study explores the interaction between ERMs and aspirants, not by testing pre-defined hypotheses but by building theoretical notions through context-sensitive interpretations.

The author started this research with two core questions: do entrepreneurial role models have anything to do with sustainable orientation of entrepreneurs? And if yes, how these interactions happen and shape those orientations? The author was using Social Learning Theory by A. Bandura, which emphasizes the importance of observing, modelling, and imitating the behaviors, attitudes, and emotional reactions of others. Bandura believed that learning

could occur through observation alone, without the need for direct reinforcement, which provided the necessary framework for perceiving ERMs not only as individuals for this study (Bandura, 1977). However, it is important to highlight that the theory was used rather than for building a necessary framework about role models and their interaction process with aspirants, for retrieving the hypothesis, and for testing them later.

Very few studies explored the ERMs in the sustainable context, and most of them were quantitative studies (for example, Deipolder et al., 2024). The qualitative approach, however, allows entrepreneurship researchers to inductively or abductively build theories in close interaction with contexts, meanings, and processes (Van Burg et al., 2020). This study applied an explorative qualitative study research approach to understand the interaction between ERMs and sustainable orientations of entrepreneurs

### **Empirical data**

The author selected the Estonian entrepreneurial ecosystem as a research context for this study. Estonia is a small open economy and a minor entrepreneurial region (Reidolf et al., 2018). However, the entrepreneurial activity in Estonia is high, as the country is constantly being placed in the top among innovation-driven economies in terms of early-stage entrepreneurship rate (GEM reports from 2016 to 2023). In terms of the exposure of entrepreneurs to direct role models, entrepreneurship has a good public profile in Estonia, with more than two in five adults knowing someone who has started a business recently (third highest in one of the rankings) (GEM report, 2023), which makes this ecosystem especially interesting for this study. Regarding sustainable orientations of the ecosystem, based on the most recent data from GEM report 2023/2024, recent governmental policies have increased financial support for the transition to “green” businesses for Estonia as a whole (GEM, 2023 report). Goals for Estonian sustainable development have been agreed until the year 2030 in National Strategy on Sustainable Development “Sustainable Estonia 21”. These goals are: the vitality of Estonian cultural space; increase of people’s welfare; socially coherent society; ecological balance (Ministry of Climate official website, Republic of Estonia). In other words, Estonia has vibrant EE, high exposure to direct role models, and a strong sustainable orientation of the ecosystem, making it a great context for this study.

The author has chosen a purposeful sampling strategy for depth, and the primary source for the empirical data consisted of eight in-depth interviews with startup founders or co-founders of the ventures that can be considered sustainable in a broad sense, meaning creating future products, processes, and services that contribute positively to the environment and society while also being economically beneficial (Shepherd, Patzelt, 2011). The selection of the startups, the founders of which were asked to be interviewed was based on an open data source about the venture, including:

- startup database in Estonia (retrieved online from the public startup Estonian website [ecosystem.startupestonia.ee](https://ecosystem.startupestonia.ee));
- available governmental sources (public statistical data about companies, for example, [teadmik.ee](https://teadmik.ee));
- these venture’s own social media.

If the startup matched the criteria of being economically beneficial and contributing positively to the environment or society, then founders were invited for the interview. In some cases, the author adopted the snowball sampling method asking interviewees to share their local network contacts of sustainable venture founders.

In the beginning of the interview all the interviewees were asked about their own perception of the sustainable orientation of their venture. If interviewees confirmed sustainability of the venture as one of the brand values, then this interview was considered as potentially valuable for the further data analysis.

All the interviewed founders were actively involved into managing the ventures on the moment of the conducting the interview. The startups fields varied from DeepTech industry to Digital Health industry (see Table 1 for more information). Data collection took time in March-June of 2024. The average duration of the interviews was approximately one hour. Seven of the interviews were conducted via online meeting in Microsoft Teams, one was conducted in a face-to-face environment. The interview guide was built considering Social Learning Theory and used an extended approach to understanding of ERMs diverse nature. A significant part of the questions was about the impact and how respondents internalized the impact values, what the process was, and what ERMs had to do with these processes. At the start of each interview, the author started by informing interviewees about the interview context and the possibility to stay anonymous to create a safe and open environment. All the interviews were conducted in English and transcribed using internal Microsoft Teams tool and analyzed.

**Table 1.** The list of interview respondents and data about their motivations and role models.

Name (assign.), gender, interview format	Company's business idea	Sustainability pillar	Motivation for impact	Role models for impact	Motivation for entrepreneurship	Role models for entrepreneurship
T, female, online interview	Application that increases mindfulness while being online	Social	Doing things differently rather than thinking about constant growth since it does not work long-term	Elon Musk - negative role model.	1. Fear of being poor and seeing entrepreneurship as the only opportunity (due to crisis historical events in Estonia). 2. Guilty feeling of being entrepreneurial lecturer without any prior real experience	Mentor from local EE - negative role model
F, female, online interview	Chemical process development for a technology focused on using wood waste and agricultural residues	Environmental	Knowledge about climate change. The more she learned, the more she became impact-oriented	PhD supervisor and later a co-founder	Desire not to let technology to die in the lab	Friend, C, who did PhD with F and immediately after started the business - positive role model
K, female, online interview	Upvalue textile waste	Environmental	Redemption for her previous very wasteful work experience	1. Danish clothing company brand that was sustainable 2. Companies from the similar packaging field	Finding the tool to stop making waste and start her "redemption"	1. Co-founder 2. Companies from the similar packaging field (example - Vuola)
M, female, online interview	Leather-like sustainable material	Environmental	"Redemption" for the very wasteful textile industry, growing from awareness and own experience in apparel industry	1. Other companies who use sustainable leather-like materials (Orange Fiber/Pinatex)	General interest in entrepreneurship. Not happy with previous work in apparel industry	University lecturer who started own business
L, female, online interview	technology to help landowners better tackle the climate potential of their land.	Environmental	„Work has always been a core part of life, so finding meaning in my job has always been essential. I know that many people find meaning in other areas of their life, but I'm one of those who seeks it within my work“	Co-founder	Love to startup culture and benefits it provides. "Caught a startup bug", being hands-on, making an impact, and building something from scratch.	1. Founders she dealt with during her work in investment fund 2. Co-founders of a big estonian lighthouse
C, female, face-to-face interview	Product that translate the discoveries made in academic labs into new potential drug targets.	Environmental Social	Childhood Influence: Always tried to fix the world. Personal tragedy: father's death at age 3, mother's hard work, ethics and resilience inspired her	Mother	COVID situation that proved to her that entrepreneurship seemed the only way to make an impact	Mother
TU, female, online interview	AI agent that helps landowners and farmers navigate available grants and subsidies, and provides advice on woodland creation, micro-forestry, and other tree-related initiatives.	Environmental	Not to replicate previous work experience of companies that were not mission-driven	1. Cybersecurity company with no mission - negative role model 2. Italian fashion designers who promote "humanitarian capitalism," a concept emphasizing profit-making while taking care of all stakeholders	1. Being tired of constantly justifying decisions in male-dominated environments 2. The difficulty of finding jobs as women in our 40s within the startup ecosystem.	Italian fashion designers who promote "humanitarian capitalism," a concept emphasizing profit-making while taking care of all stakeholders
R, female, online interview	Product that systematically collects patient feedback. Healthcare industry	Social	Desire to create impact, personal story when partner was diagnosed with melanoma	Previous boss in healthcare and a teacher	Restrictions of healthcare sector career-wise	Co-founder

### Data analysis

The author followed explorative qualitative study analysis approach, which is particularly suitable for understanding complex phenomena, such as the interplay between entrepreneurship role models and sustainable practices in ecosystems. The analysis was organized in the following way:

- First, the author transcribed the interviews and familiarized herself with them through multiple iterations of reading in order to get a preliminary understanding of emerging themes;
- Second, the author conducted initial coding of the interviews by paraphrasing the interview quotes relevant to this article. The aim of this process was to simplify and condense the empirical data, focusing on

extracting key information while preserving the respondents' original wording as closely as possible. (Charmaz, 2014.).

- Third, the author consolidated the initial codes to derive focused codes and eliminate less relevant topics and organized them using Google Documents facilities.
- Fourth, the author iteratively developed the emerging categories by contrasting the empirical data and the existing literature. While working on the categorization, the author was using mindmap tool in the mindmeister.com environment in order to structure and organize the categorization patterns and make the whole process more transparent and reliable. As the final step, the author built a table of emerged categories, which is represented in Table 2. By comparing the selected cases and identifying similarities and differences between them, this study identified three unique aspects of the role of ERMs in developing sustainable entrepreneurial motivation: (1) diversity of ERMs, (2) ERMs roles at different venture and personal development stages, (3) negative role models and their influence on sustainable motivations of aspirants.

**Table 2.** Categories emerged from the data and key insights.

Category	Sub-category	Key Insights	Supporting Literature	Category	Sub-category	Key Insights
Diversity of ERMs	Family members	Family members (parents, peers, and friends) inspired entrepreneurial ventures with a focus on social and environmental impact.	Shepherd & Patzelt, 2011	Diversity of ERMs	Family members	Family members (parents, peers, and friends) inspired entrepreneurial ventures with a focus on social and environmental impact.
Diversity of ERMs	Market competitors	Competitors demonstrating dual-value creation (profitability + sustainability) served as practical examples.	Abbasiancha vari & Moritz, 2020	Diversity of ERMs	Market competitors	Competitors demonstrating dual-value creation (profitability + sustainability) served as practical examples.
Diversity of ERMs	Famous entrepreneurs and lighthouses	Entrepreneurs and companies (local or global) encountered in books or media inspired sustainable values in business.	Greenwood & Hinings, 1996	Diversity of ERMs	Famous entrepreneurs and lighthouses	Entrepreneurs and companies (local or global) encountered in books or media inspired sustainable values in business.
ERMs at different development Stages	Pre-Venture phase	Role models provided guidance and inspiration to form a sustainable vision and entrepreneurial intentions before venture establishment.	Bosma et al., 2012	ERMs at different development Stages	Pre-Venture phase	Role models provided guidance and inspiration to form a sustainable vision and entrepreneurial intentions before venture establishment.
ERMs at different development Stages	Childhood influence	Early exposure to role models with sustainability values had a long-term impact on sustainable orientation of future entrepreneurs.	Gibson, 2004	ERMs at different development Stages	Childhood influence	Early exposure to role models with sustainability values had a long-term impact on sustainable orientation of future entrepreneurs.
ERMs at different development stages	Active-venture phase	Estonian entrepreneurial ecosystems' role models (mentors, teachers, investors) offered practical support during venture operations, particularly in decision-making and strategy.	Bosma et al., 2012, Nucci et.al, 2024	ERMs at different development stages	Active-venture phase	Estonian entrepreneurial ecosystems' role models (mentors, teachers, investors) offered practical support during venture operations, particularly in decision-making and strategy.
Negative ERMs and sustainable orientations	"Triggering" mechanism	Negative role models motivated entrepreneurs to prioritize sustainability by acting in opposition to observed unethical or unsustainable behaviors.	Sparrowe & Liden, 2005	Negative ERMs and sustainable orientations	"Triggering" mechanism	Negative role models motivated entrepreneurs to prioritize sustainability by acting in opposition to observed unethical or unsustainable behaviors.



This finding underscores the complexity of role model interactions and the diverse mechanisms through which they influence entrepreneurial behavior (Bosma et al., 2012; Gibson, 2004).

## Discussion

The findings of this study contribute to the understanding of how entrepreneurial role models (ERMs) interact with sustainability-oriented behaviors and values in entrepreneurs.

First, they enrich the current understanding of the diverse influencing nature of the role models. As was stated in the results section, entrepreneurs interviewed for this study were influenced by a variety of role models—ranging from family members to market competitors and famous entrepreneurs whose stories they encountered in books and other media sources. This aligns with previous research that emphasizes the diversity of ERMs and their varied sources (Abbasianchavari & Moritz, 2020). The heterogeneous nature of ERMs suggests that entrepreneurs are not limited to direct, personal contacts but can be inspired by distant figures as well, highlighting the broad scope of influence from ERMs. What is interesting to note, is that - also aligning with previous research (Mead, 1932), - role models that interviewed aspirants chose for themselves did not become an object for a complete imitation, but aspirants rather chose the set of traits, features or behaviors they intended to emulate. This study also confirmed that “individuals perceived as role models function as ‘significant symbols’ in that they stand for certain acts or desired situations that the perceiver finds meaningful” (Mead, 1932). Most of the interviewees highlighted that sustainable values were perceived from one role model, while entrepreneurial intentions were obtained from other role models, and rarely these two value sets were combined in a one person, story or venture.

Secondly, this study confirmed that in a sustainable context, the impact of role models appears to be very stage-specific in the entrepreneurial journey. Considering the “splitting” nature of (1) sustainable values and (2) entrepreneurial intentions, the features to be rarely being combined within one role model, the results of the study have revealed that most of the respondents had chosen sustainable role models before starting their entrepreneurial journey, and the combination of the sustainable value sets that they absorbed from the role model(s), accompanied by entrepreneurial intentions obtained later from other role models had significantly influenced the outcome – founding a sustainable venture. For some, significant role model sustainable influence occurred even during the childhood or early university years long before even thinking about one’s entrepreneurial identity. This nuanced understanding supports Bandura’s Social Learning Theory (1977), which posits that learning through observation can occur at various stages of personal and professional development.

Thirdly, this study contributes theoretically into the understanding of contradiction that were revealed by other researcher in the classical Social Learning Theory by A. Bandura. For example, Chen (2016) identified the boundary condition in the theory, that predicts that a negative role model would reduce one’s intent to pursue an entrepreneurial career and argued with that providing a study that shows that this prediction holds only for people with low self-esteem, while for people with high self-esteem observing an entrepreneurial failure increases entrepreneurial intentions (Chen, 2016). This study aligns with Chen’s findings and expands the understanding of the theory into a sustainable context. As findings have revealed, negative role models proved to also sometimes function as catalysts for a positive sustainable entrepreneurial action. Exposure to negative role models—in the sense of this study to those who engaged in unsustainable or unethical behavior—had a positive impact on some entrepreneurs. This group reported that these role models motivated them to act oppositely, driving them toward more sustainable practices. This reflects the idea that role models do not only inspire through positive examples but can also influence behavior through opposition (Chen et al., 2016), and not only in the sense of pursuing entrepreneurial career, but also being engaged in more sustainably oriented entrepreneurial activity. However, the same group reported simultaneously that to get this “opposite” action effect, they had to go through perceiving of those role models from positive ones to negative ones, and only after observing the negative consequences of the unsustainable behavior. For example, as one of the respondents shared, after trying to imitate some of the Elon Musk work practices in her own startup and getting burned out very soon, she started to build a “...completely different processes. How I am handling is different, (since before) I was constantly comparing myself with others. Worried, anxious, gloomy, lost my joy. Everything we do with a team (now) is joyful. I am not putting my own anxiousness on other people”. The practical implication of this findings could find its place in the education process within EE that is trying to transition to more sustainable entrepreneurial practices: long-term negative effects and failures of unsustainable practices could be discussed and presented more through, for example, role model narratives within university courses, accelerator programs and other EE supporting systems. Currently, as claimed by (M. Wildmannova, 2017) „given that social entrepreneurship is more specific than traditional business, it is necessary to adapt the curricula accordingly“.

Since Estonian entrepreneurial ecosystem was chosen as a context for this study, the author also was trying to identify the connections and underlying mechanisms of the ecosystem as a role models supplier and the perception of it by the respondents, the importance of this understanding highlighted by other researchers: “it is imperative to explore the influencing factors that shape <sustainable> practices. These factors encompass various internal and external elements, from organizational dynamics to market forces and stakeholder pressures” (Ahmadov et al.,

2007). The Estonian entrepreneurial ecosystem is characterized by strong government support for sustainable ventures and high visibility of entrepreneurial figures, aiming to provide a fertile ground for sustainability-oriented role modelling, understanding that “creating social value is an effective, efficient, and sustainable way to get out of social inequality” (Wahyudi et.al, 2022). As the study has shown, entrepreneurs in this ecosystem benefit from both direct and indirect role model exposure, as seen in the various lighthouses and successful ventures that act as role models within the ecosystem, supporting the idea of an orchestrating role of the ecosystem and its important role in the sustainable transition (Tiba et al., 2020). The other finding that this study revealed was that the more respondents were nurtured by the ecosystem mechanisms, the more direct role models they could have easily remembered and name. Those who found themselves rather detached from the ecosystem support were mostly using narratives as role models. Interesting to note is that the provided description of direct role models was more detailed and fruitful, while if the role model was borrowed from a book or a movie (when the interaction was obviously one-sided), then the insights were more limited and narrower. The author considers this as an interesting path for the future research –in order to understand more about differences between direct and indirect role models playing role in sustainable orientations of entrepreneurs.

Overall, the interaction between ERMs and entrepreneurs in the context of sustainability is multifaceted, with role models playing a crucial role at different stages of venture development, even before the venture development starts, and in both positive and negative capacities. These findings extend the current understanding of ERMs and aim to expand the understanding of how Social Learning Theory can be applied to the modern context of sustainable entrepreneurial ecosystems and their role models.

## Conclusion

This research highlights the significant and multifaceted influence that entrepreneurial role models (ERMs) have in shaping the sustainability-driven behaviors of entrepreneurs. Unlike traditional assumptions that entrepreneurs are solely inspired by positive figures, the findings reveal that role models can emerge from a wide range of sources, including family members, market competitors, and even well-known entrepreneurs encountered through books or media. The diversity of these role models highlights the fact that entrepreneurs are not confined to personal, direct relationships to derive inspiration, but can be influenced by figures with whom they may have no direct contact, so-called indirect role models. These varied sources of role models play crucial roles in guiding an entrepreneur's values, particularly concerning sustainable business practices.

The study further emphasizes that the influence of ERMs in a sense of promoting sustainable practices is not connected to a specific phase of the entrepreneurial journey. Instead, role models can have an impact on sustainable and entrepreneurial values at any stage, from early childhood and adolescence, when foundational values are being shaped, to later stages of venture development. This finding adds depth to existing literature by showing that role model influence can be a continuous and evolving process, shaping sustainable intentions long before the actual formation of a business. For some entrepreneurs, early exposure to sustainability-oriented figures planted the seeds of their future entrepreneurial identity, which later grew into a business venture with a focus on sustainability.

One of the most compelling contributions of this research is its exploration of the role of negative role models—individuals who, through their unsustainable or unethical behaviors, inadvertently motivate others to act in a more sustainable manner. Contrary to the traditional view that role models must serve as positive examples, this study shows that negative role models can catalyze opposite behaviors, prompting entrepreneurs to reject unsustainable practices and adopt more ethical and environmentally friendly approaches. This insight provides an important addition to Bandura's Social Learning Theory, which typically emphasizes the influence of positive role models in shaping behavior. By showing that negative role models can also foster positive outcomes, this research expands the theoretical framework to include the role of opposition as a driver of sustainable entrepreneurship.

Moreover, the research points to the critical role of entrepreneurial ecosystems, particularly the Estonian context, in fostering an environment favorable to role model exposure. The study reveals that ecosystems like Estonia, which offer robust government support for sustainable ventures and high visibility of entrepreneurial figures, play an important role in nurturing sustainable entrepreneurs. Entrepreneurs within these ecosystems benefit from direct exposure to successful figures who embody both entrepreneurial success and a commitment to sustainability. The findings indicate that those who are more embedded in such ecosystems have access to richer and more impactful role model interactions, while those outside these networks often rely on more distant or indirect sources, such as books or media, which provide a less detailed and narrower range of insights.

## Limitations of the research

First, this study was conducted in the Estonian entrepreneurial ecosystem, and the findings may not apply to other regions or ecosystems that offer different levels of support and role models for sustainable ventures. Second, the qualitative nature of the study, may not fully capture the variety of experiences across different industries and types of entrepreneurs. Additionally, relying on participants' self-reported data introduces the possibility of biases, such as memory recall issues or the tendency to present their experiences in a more favourable light. Lastly, this study

focused primarily on entrepreneurs who had successfully founded sustainable businesses, potentially overlooking the experiences of those who failed or chose not to pursue entrepreneurship after interacting with ERMs.

### **Suggestions for future research**

To elaborate on these findings, future research could explore the influence of entrepreneurial role models on sustainability in other cultural and entrepreneurial contexts. Comparing different ecosystems could reveal how local factors shape the role of ERMs in fostering sustainable entrepreneurship. A longitudinal approach would also be valuable, tracking how the impact of role models changes over time as entrepreneurs move from idea generation to venture development and growth. Additionally, incorporating quantitative methods alongside qualitative ones would provide a more comprehensive and statistically robust understanding of how role models influence sustainable entrepreneurship. Finally, studying entrepreneurs who failed or chose not to pursue sustainability after encountering role models could offer a complete picture of the varied effects ERMs have on entrepreneurial behaviour.

In conclusion, this study offers valuable insights into the dynamic nature of entrepreneurial role models and their critical role in shaping sustainable entrepreneurial behaviour. By expanding the understanding of how both positive and negative role models influence entrepreneurs and by emphasizing the importance of supportive ecosystems in fostering these interactions, this study contributes to a more nuanced understanding of how sustainability becomes embedded in entrepreneurial ventures. It also suggests that entrepreneurial education and ecosystem design should incorporate both types of role models—positive and negative—as powerful tools for promoting sustainability-oriented entrepreneurship.

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