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2024-10-02

Deposited version:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Dias, Á., Palacios-Florencio, B. & Hallak, R. (2024). Drivers of social innovation for tourism enterprises: A study on lifestyle entrepreneurship. *Journal of Sustainable Tourism*. 32 (10), 2141-2158

Further information on publisher's website:

10.1080/09669582.2023.2272221

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Drivers of Social Innovation for Tourism Enterprises: A study on Lifestyle Entrepreneurship

Dias, Á.^{1*} Palacios-Florencio, B.² and Hallak, R.³

1. Álvaro Dias, ISCTE-IUL and BRU-Business Research Unit, Lisbon, Portugal.
alvaro.dias@iscte-iul.pt. ORCID: 0000-0003-4074-1586
2. Beatriz Palacios-Florencio, Universidad Pablo de Olavide, Seville, Spain.
bpalacios@upo.es.
3. Rob Hallak, UniSA Business, University of South Australia, Adelaide, Australia.
Rob.Hallak@unisa.edu.au.

* Corresponding author

FUNDING INFORMATION

This work was supported by Fundação para a Ciência e a Tecnologia, grant UIDB/00315/2020.

Abstract

The importance of tourism lifestyle entrepreneurs (TLEs) for the sustainability and competitiveness of tourism destinations has gained much attention from academic researchers and policy makers. A key characteristic of TLEs is their social ties and attachment to the physical and social environment, this in turn drives motivations to support and protect the destination that enables entrepreneurs to achieve their lifestyle goals. Thus, the interdependencies between TLEs and destination is a catalyst for value co-creation and social innovation (i.e., generating and implementing new solutions to social problems and needs). While the extant research has focused on business' financial performance outcomes, our understanding of the drivers of TLE social innovation and the implications for the sustainability of tourism-based communities remains a major gap. This study analyzes survey data through PLS-SEM and fsQCA to identify the factors influencing TLEs social innovation activities. Findings suggest that 1) value co-creation, and 2) TLE proactiveness directly influence social innovation, and support a mediation effect on the relationship between the businesses' market orientation and social innovation practices. These findings introduce new knowledge on the drivers of TLE social innovation, with practical implications for local governments and destination authorities in supporting the sustainability of destinations.

Keywords: Social innovation, tourism lifestyle entrepreneurs, sustainability, co-creation, entrepreneurship.

1. Introduction

Tourism enterprises provide the essential products and services for tourism activity including accommodations, transport, attractions, experiences, food and beverages. They are especially pivotal in supporting regional and rural destinations, acting as ‘economic engines’ and creating a multiplier effect that stimulates local economies and boosts growth and prosperity (Getz et al. 2004; Hallak & Lee 2023). However, tourism enterprises are often initiated and operated by individuals with ‘lifestyle objectives’, in contrast to profitability or growth oriented objectives (Dias & Patuleia, 2021; Hallak & Lee 2023). This has led to many owners/operators of tourism firms to be classified as ‘tourism lifestyle entrepreneurs’ (TLEs), motivated to create and operate tourism enterprises for the purposes of achieving ‘lifestyle’ related goals. Lifestyle goals include establishing and making a living in a specific (and often desirable) destination (place), and developing social, economic and environmental attachments to the place and its community. In addition, a large number of small and medium tourism enterprises (SMTEs) are family owned establishments, with family dynamics influencing entrepreneurial and lifestyle oriented goals throughout the entrepreneurship process (Getz & Carlsen 2000; Hallak, Assaker & O’Connor 2014; Kallmuenzer 2018). The lead entrepreneur in an SMTE (including family owned SMTEs) often shapes the strategies and business activities (Hallak et al 2014), as well as being an important actor in driving firm innovation (Kallmuenzer 2018). Thus, the tourism entrepreneur and the business become intertwined as “the small business firm is simply an extension of the individual who is in charge” (Lumpkin & Dess, 1996, p. 138), with implications for how the tourism firm operates within the destination.

Recent studies have examined the interconnectedness between tourism entrepreneurship, tourism entrepreneurs’ lifestyle motivations, and the local community where the business operates (Dias et al. 2023). TLEs, in pursuit of lifestyle objectives, develop strong bonds with local community stakeholders that foster trust and build social capital (McKeever et al., 2015). Tourism enterprises, especially those in regional rural destinations, buy local products and services and employ locals (Carlsen et al., 2008). These entrepreneurs have

vested interests and are committed to preserving the way of life of the local destination (Wang et al. 2019a). Consequently, these entrepreneurs adopt more socially responsible behaviours when compared to larger organisations (Marchant & Mottiar, 2011) and show a strong commitment to sustainable tourism - tourism activity that, fosters the protection and integrity of the local community, its natural environment and cultural (Angelkova et al., 2012; Dahles et al., 2020).

Entrepreneurial individuals are key players in the entrepreneurial ecosystem of a destination through their leadership, facilitation of networks and sharing business knowledge (Bachinger, Kofler and Pechlaner 2022). Collaborations between the entrepreneur and internal actors (entrepreneurial family, employees), and external actors (tourists/guests, competitors and other businesses in the regions) facilitates the knowledge transfer and builds capacity for new innovation (Kallmuenzer 2018). TLEs who develop strong social ties and connections with key stakeholders are at the forefront of innovation at the destination (Ateljevic & Doorne, 2000; Yachin, 2019). Innovation takes form in new products and services, with collaborations between TLEs and stakeholders facilitating co-creation of authentic and innovative experiences, as well as supporting social innovations (Dias et al., 2023; Dias et al., 2022). Social innovations are key to sustainable development where the focus is on overcoming social exclusion, improving the quality-of-service provision and quality of human life (Moulaert et al. 2013). In a tourism context, social innovations are those that focus on benefiting the local people, employees, environment, and heritage of the destination (Font et al., 2016).

There is the reality that TLEs face conflicting goals between supporting the local community (e.g., buying from local suppliers, engaging in CSR), or doing what is necessary for business efficiency, profitability and survival. TLEs operate with limited access to resources such as financial or human capital which restricts their capacity to innovate, especially in regard to social innovations which are often an unattainable cost for many businesses (Cooper, 2015; Marchant & Mottiar, 2011). Research focusing on TLE's capacity to support the sustainability of the local destination through social innovation remains largely unexplored in the literature. As such, this study will address the research gaps through an empirical examination of the processes by which TLEs generate social innovation. The research will address two key questions: 1) What are the key factors that enable TLEs to develop social innovations in a destination?; 2) How can TLEs' social innovations emerge from different processes?.

The processes leading to social innovation are not uniform and there are various patterns that constitute different approaches and outcomes. Based on the literature, the interdependencies between TLEs and local stakeholders facilitates ‘co-creation’; enabling these entrepreneurs to leverage their link to place and, simultaneously, deliver immersive and authentic experiences.

Drawing on the resource-based view (RBV) of the firm (Barney, 1991), the study examines a diverse set of factors influencing (directly and indirectly) TLEs’ social innovation practices. Specifically, RBV posits that an organization’s business strategies are largely associated with the evaluation of its available resources (Spanos & Lioukas, 2001). Evidence also suggests that firm idiosyncrasies are a function of the relationships between the firm’s unique internal characteristics, resources and performance (Barney, 1991). Adopting an entrepreneurship based theoretical framework, this study examines a network of relationships among TLE’s proactiveness, opportunity recognition, market orientation, value co-creation (Liu & Huang, 2020) and the outcomes for social innovation activities. Data was collected from 221 TLEs in Portugal and analyzed through 1) Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypothesized model and the drivers of social innovation; 2) Fuzzy-set Qualitative Comparative Analysis (fsQCA) for identifying combinations of variables that explain social innovation.

Understanding the drivers of social innovation presents implications for destination managers and Governments in supporting sustainable tourism development, also aligning with UN Sustainable Development Goals of ‘Industry, Innovation and Infrastructure’, and ‘Sustainable Cities and Communities’ (UN Department of Economic and Social Affairs, 2023)

2. Theoretical Framework and Hypotheses

Social innovation is a complex process that requires a variety of entrepreneurial skills and abilities (Dwivedi & Weerawardena, 2018). The RBV framework can be used to identify the resources and capabilities of TLEs that enable them to create and deliver innovative solutions (Spanos & Lioukas, 2001) that address social problems or needs. By combining the analysis of social innovation from an entrepreneurial perspective, the conceptual model integrates well-established antecedents of entrepreneurship in general. Research

has shown that proactive entrepreneurs are more likely to identify and pursue new opportunities (Anwar, et al., 2022), and that entrepreneurs who are market-oriented and able to co-create value with their customers are more likely to be successful (Mohammadi & Heshmati, 2021). Furthermore, integrating co-creation into the model reveals how entrepreneurs tap into the knowledge and expertise of a diverse range of stakeholders to develop and deliver innovative solutions to social problems (Yan et al., 2019). Accordingly, the theoretically derived integrated model hypothesizes that TLE entrepreneurial activities (proactiveness, opportunity recognition, market orientation) are positively related to both value co-creation and social innovation, with value co-creation also presenting a mediating effect on social innovation (Figure 1).

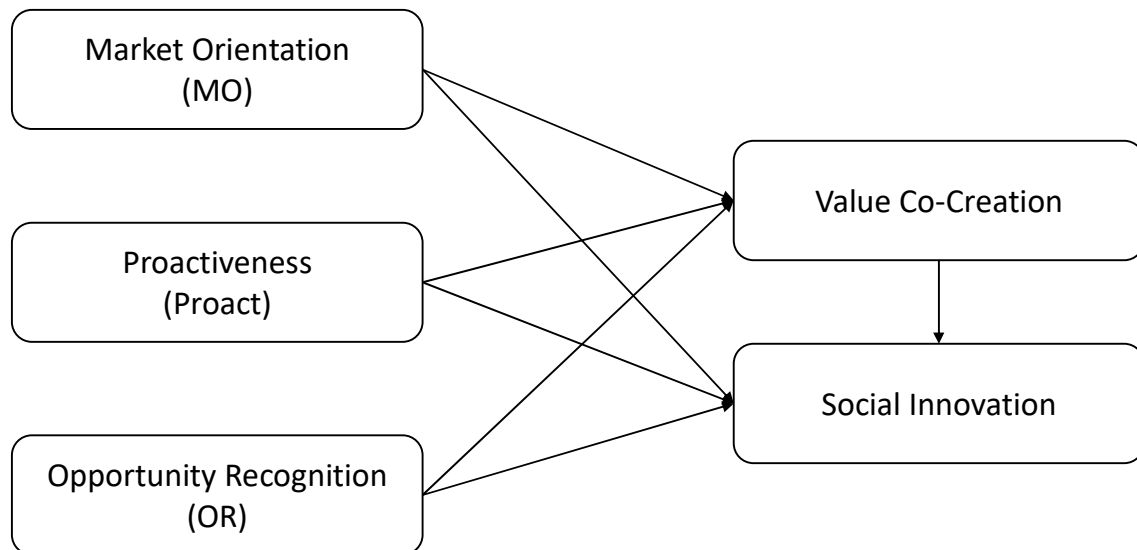


Figure 1: Integrated Model of TLE Social Innovation

2.1 Drivers of TLE Social Innovation

Social innovation refers to “finding acceptable progressive solutions for a whole range of problems of exclusion, deprivation, alienation, lack of wellbeing, and also to those actions that contribute positively to significant human progress and development” (Moulaert et al. 2013, p.16). TLEs through their embeddedness and social ties develop the knowledge base and capacity to innovate their products, services, as well as social innovations

(Dias et al. 2020, 2023). For example, interactions with external actors (visitors) (see Kallmuenzer 2018) enables TLEs to understand visitor needs and gain key market insights on tourism demand and behaviors (Bredvold & Skålen, 2016; Marchant & Mottiar, 2011;) enabling them to anticipate changes in the market environment (Eikhof & Haunschild 2006; Peters & Kallmuenzer, 2018). Thus, the interactions between TLEs and visitors, and TLEs and the local community, creates the foundation for developing a unique value proposition through co-creation processes (Yachin, 2019; Dias et al., 2021). In this study, we posit that key entrepreneurial skills (opportunity recognition, entrepreneurial orientation, proactiveness) facilitate both co-creation of experiences and value, as well as driving TLEs' social innovation practices.

2.1. The role of value co-creation on social innovation

Value creation is an essential and core aspect of economic exchange and is achieved through collaboration between the business and its stakeholders (customers, suppliers, employees, etc.) (Pee, 2016). The concept of 'co-creation' was developed within the service-dominant logic (Vargo & Lusch 2008) and is associated with the sharing of knowledge and resources when a service is exchanged between two or more parties (Mathis et al. 2016). The collaborative effort between an organization and its stakeholders for creation of value is therefore conceptualized as 'co-creation', and distinguished from creation (Killa, 2014; Taghizadeh, Jayaraman, Ismail & Rahman, 2016). Co-creative activity incorporates the input of at least two parties: the organisation and its counterpart (customer, supplier, employee, etc.) (Saarijärvi, Kannan, and Kuusela (2013), and the co-created value must be beneficial for all actors involved (Lusch & Vargo, 2018; Killa, 2014; Pee, 2016). Therefore, the ability to exchange and create experiences with the input of stakeholders plays an essential role in TLEs innovation outcomes (Bredvold & Skålen, 2016; Dias et al., 2020). This forms the basis for the following hypothesis.

H1. Value co-creation of tourism experiences positively relates to social innovation outcomes generated by the TLEs

2.2. Market orientation, value co-creation and social innovation

A businesses' capacity to innovate - introduce new products, new services, or new processes - is of vital importance for its survival (Bulut, Eren & Halac, 2013). Social innovation refers specifically to innovative activities that generate and implement solutions to social problems and needs (Gasparin et al., 2021). However, the benefits of social innovation also extend to the organization implementing these innovations through business growth and market value (Kreiser, Marino, Kuratko & Weaver, 2013; Van Wijk et al., 2019). Furthermore, evidence suggest that businesses with a strategic focus on their consumers (market orientation) also develop a greater capacity to innovate (see, Grinstein, 2008; Zhang and Zhu, 2016).

TLEs are limited in their marketing resources as compared to larger organizations, however, they are distinguished by both their proximity to customers and the entrepreneurs' local attachments and social networks (Bredvold & Skålen, 2016). They have greater levels of engagement and personal interactions with their customers (Eikhof and Haunschild 2006) gaining access to valuable local knowledge and market developments (Bredvold & Skålen, 2016). The combination of market monitoring and increased responsiveness to change is consistent with the building blocks of market orientation (c.f., Chuang 2018). This proximity also facilitates collaborative activities with local stakeholders contributing to delivering authentic tourism experiences (Valtonen, 2009; Schilar & Keskitalo, 2018), and promoting tourist involvement in the design and realization of immersive experiences (Andersson et al., 2010; Shaw & Williams, 2009) and creative (Richards, 2011). Based on this evidence the following hypotheses are proposed:

H2. TLE's Market orientation positively relates to value co-creation in tourism experiences.

H3. TLE's Market orientation positively relates to the generation of social innovations.

2.3. The role of opportunity recognition on value co-creation and social innovation

Opportunity recognition – the process of identifying market needs through the creative combination of resources (Richards, 2011) – is a principle concept of entrepreneurship. Opportunity recognition involves two processes: (i) Categorization - a systematic process of environmental scanning; (ii) Alertness - which results from less

structured practices associated with the entrepreneur's perceptions (Honing and Samuelsson 2012). Evidence suggests that TLEs - by their nature as small independent enterprises run by generalists (rather than specialists) – tend to recognize market opportunities through an ad hoc, less structured process that is often serendipitous. Their access to local knowledge facilitates identification of opportunities for new product and service differentiation, as well as the involvement of internal and external stakeholders for the co-creation of experiences (Schilar & Keskitalo, 2018). In this study we posit that the ability to identify opportunities also affects ‘social’ innovation, as entrepreneurs perceive and pursue actions to improve their place and community.

H4. Opportunity recognition positively relates to value co-creation of tourism experiences.

H5. Opportunity recognition positively relates to social innovation generated by TLEs.

2.4. The role of proactiveness on value co-creation and social innovation

Proactiveness involves the implementation of activities aimed at identifying, tracking and monitoring changes in the business environment, consumer tastes, and technological processes (Lumpkin & Dess, 2001). Proactiveness is also related to anticipating opportunities vis-à-vis competitors and anticipating responses to possible future problems or foreseeable changes in demand (Venkatram, 1989). Previous research also highlighted the importance of the entrepreneur's ability to act proactively as a basis for generating value for customers (Liu & Huang, 2020; Ratten et al. 2021).

The level of proactiveness also affects the entrepreneur's level of engagement in the community and the capacity to transform local knowledge into innovation (Dias et al. 2020; Marchant & Mottiar, 2011). However, the transfer and sharing of knowledge between the entrepreneur and the community requires a symbiotic relationship, working together to strengthen ties and communication that facilitates context-based knowledge that fosters such innovation (Hoarau, 2014; Wang et al., 2019a). This forms the basis for the following hypotheses.

H6. Proactiveness of TLEs is positively associated with the value co-creation of tourism experiences

H7. Proactiveness of TLEs is positively associated with the level of social innovations generated.

2.5. Mediating effects of value co-creation in tourism experiences

According to the RBV theory, developing sustainable competitive advantage depends on the firm's ability to orchestrate resources in a unique, inimitable, and effective way (Spanos & Lioukas, 2001). In this sense, the level of customer involvement in co-creation of products and experiences has a leveraging effect on innovation (O'Cass & Ngo, 2012). Previous research on the relationships between market orientation and innovation have presented mixed results; while some support a direct positive effect (see Grinstein 2008; Newman et al. 2016), others have failed to support a linear and positive relationship (Gelhard et al. 2014). TLEs are integrated in local communities which provides opportunities to access local knowledge and engage stakeholders for delivering innovative experiences through co-creation processes (Binkhorst & Dekker 2009; Yachin 2019). As such, co-creation functions as an important enabler to convert market-oriented activities into product and experience innovations (Dias et al., 2023; Ioannides & Petersen, 2003).

The ability to transform opportunities into innovation is not linear as it depends on how TLEs are able to act on the opportunities and adapt business processes (Dias et al; Yachin, 2019). Dias et al. (2023) identified two groups of TLEs associated with higher levels of innovation. The first group is characterized by smaller businesses that are able to capitalize on a limited number of opportunities, while the second includes larger and more structured businesses that are endowed with formal processes to capture market opportunities.

Tourism entrepreneurs experience several barriers to implementing innovations including staff resistance to change, as well as the risk of customer non-acceptance (Lee, Sardeshmuk & Hallak 2019). Furthermore, the service-dominant logic posits that firms engage customers in value co-creation when the interactions with the customers are more enduring (rather than transactional) (Mathis et al. 2016). Through social ties and strong connections to the place where their business operates, entrepreneurs benefit from relational proximity with stakeholders expanding the base of possibilities to provide exclusive experiences to tourists (Schilar & Keskitalo, 2018). The process of co-creation

facilitated through stakeholder engagement also creates opportunities for social innovations. This forms the basis for the following hypotheses:

- H8. Value co-creation in tourism experiences mediates the relationship between market orientation and the social innovations generated by TLEs.
- H9. Value co-creation in tourism experiences mediates the relationship between opportunity recognition and social innovation generated by TLEs.
- H10. Value co-creation in tourism experiences mediates the relationship between proactiveness and social innovation generated by TLEs.

3. METHODOLOGY

3.1. Data collection and sample

Data collection for this research took place in Portugal where approximately 10% of the country's GDP is directly linked to tourism activity and has experienced an average annual growth of 7.2% in visitor numbers over the past 10 years (prior to the pandemic) (Turismo de Portugal, 2022). Portugal's tourism sector is heavily dependent on small and medium enterprises, with evidence suggesting 43% of these firms are categorized as 'lifestyle-oriented' businesses (Dias & Patuleia, 2021). The sample for this study included the owners of independently owned, tourism related businesses, whose priority goal is the 'pursuit of a certain lifestyle'. This method for categorizing 'tourism lifestyle entrepreneurs' (as distinct from other business owners) follows the procedures undertaken by Bosworth and Farrell (2011) and Dias et al. (2023). As such, the following inclusion criteria was applied for determining TLEs for the study: (i) Owner of a tourism enterprise; (ii) Operating independently (not part of a larger organizations or franchise); (iii) The business is driven partially or totally by lifestyle objectives. This approach requires a convenience (non-probabilistic) sampling approach as no database or public categorization of TLEs, specifically, is available.

A research questionnaire, initially drafted in English, was designed based on the extant literature and was tested on three tourism academics for its face validity evaluation of the

constructs. The final version of the questionnaire was translated into Portuguese, and then back translated into English to ascertain its accuracy and content integrity. The Portuguese instrument was piloted through semi-structured face-to-face interviews with eight TLEs from different businesses and cultural backgrounds to gain feedback on content, structure and applicability. Tourism entrepreneurs for this study were recruited from five tourism conferences and workshops and were personally invited by the research team to participate in the study. Participants were then sent a link to an online questionnaire with specific instructions that is to be completed by the lead entrepreneur/ business owner of the tourism enterprise. The final version of the questionnaire was distributed between April and June 2022, achieving 221 completed responses. Of the respondents, 53% were male, and 28% were born in the place where they currently operate their tourism business. Furthermore, 18% had returned to their home community to start the tourism business. The majority of respondents (64%) were between 40 and 60 years old, while those under 40, or over 60 accounted for 20% and 16% of responses, respectively.

As expected and consistent with the structure of the tourism industry, the majority of our sample operated small enterprises with 10 or less employees (82%), of which 12% employed 1-2 staff, and 23% employed 3-4 staff. Over 30% of the businesses were accommodations (hostels, B&B), 21% were tour operators, 17% were restaurants and other related businesses. 43% of the businesses reported being established for six to 10 years, while 36% had been in operation for five years. Finally, 27% of the tourism firms from our sample self-identified as family-owned businesses. This is consistent with the general population of tourism enterprises in Portugal, and is also reflective of family business structures in the tourism and hospitality sectors (Kallmuenzer, 2018).

3.2. Variables

Market orientation was measured using seven items from Pelham and Wilson (1996), adapted to a tourism context as per Liu and Huang (2020). Sample items were ‘We are responsive to, and integrated in, serving target markets’ and ‘Our strategies are driven by our understanding of possibilities for creating value for customers’. *Proactiveness* was measured using a three-item scale adapted from Hughes and Morgan (2007): ‘We engage in market analysis to prepare for the future’; ‘We actively monitor external forces affecting us’. *Social innovation* is a dimension of the broader construct of social entrepreneurship and was drawn from Dwivedi and Weerawardena (2018). Items

included ‘We look for new ways of delivering social outcomes’. *Value co-creation* was adapted from a four-item scale from O’Cass and Ngo (2012) and Liu and Huang (2020). Value co-creation is a process involving the creative integration of internal resources to communicate with customers and explore market opportunities (Saarijärvi et al., 2013). As such, the adopted measures reflect not only the generation of creative ideas, but also the responsive behaviors and actions of the firm. Items include ‘We interact with customers to design offerings that meet their needs’. *Opportunity recognition* was measured through a two-item scale adapted from Edelman and Yli-Renko (2010) and capture the firm’s ability to attract customers and compete with other firms. All constructs were measured on a seven-point Likert-type (1 = strongly disagree, 7= strongly agree), except for *Opportunity recognition* which asks the degree of certainty on a five-point Likert-type scale (1 = very low certainty to 5 = very high certainty).

3.3. Testing for common method bias

Common method bias was addressed through both *ex-ante* and *post ante* approaches. Ex ante procedures were threefold and based on the recommendations of Podsakoff et al., (2003) and Chang, Witteloostuijn and Eden (2010). First, the questionnaire measures were derived from multiple sources. Second, common method variance was minimised as respondents were unlikely to be guided by a cognitive map due to the complexity of the conceptual model (see Chang et al. 2010). Third, demographic questions were positioned at the end of the questionnaire. Post ante procedures included Harman’s single factor test using SPSS. Our results show that common method bias is not present in our dataset, as the variance of a single factor (44.44%) is below the threshold value of 50% (Podsakoff & Organ, 1986).

3.4. Method of Analysis

Our theoretically derived model (Figure 1) was examined through Partial Least Squares Structural Equation Modeling (PLS-SEM) as the study focused on theory development to examine the drivers of social innovation. SmartPLS (v.4) was used (Ringle et al., 2018) and followed estimation and reporting guidelines of Hair et al. (2017). First, an analysis of the measurement (outer) models evaluated the reliability and validity of all latent

constructs. Second, an analysis of the structural (inner) paths was conducted to determine the relationships among the latent constructs and the predictive power of the path model.

As a follow-up procedure to the PLS-SEM, fsQCA was used to identify combinations of variables that explain social innovation. This approach extends the analysis to determine the optimal combinations of variables and extract additional causal complexity insights by analyzing the partial influence of each variable on the other variables.

4. PLS-SEM RESULTS

4.1 Outer model evaluation

Analysis of measurement (outer) model was conducted through 1) validating the reliability of the individual indicators, 2) testing for internal consistency of the latent variables, and 3) assessing discriminant and convergent validity of the constructs (Hair et al 2017). Results showed that all the factor loadings were > 0.7 (with minimum value of 0.767) and were all significant at $p < 0.001$. Internal consistency of the constructs is supported as Cronbach α and composite reliability (CR) values > 0.7 . (See Table 1). The three constructs also achieved convergent and discriminant validity, with AVE values > 0.5 and all HTMT values within their 95% confidence intervals (CI) (Bagozzi & Yi, 1988; Hair et al., 2017; Henseler et al., 2015).

-----Insert Table 1 here-----

Table 1

Composite reliability, average variance extracted, correlations, and discriminant validity checks.

Latent Variables	α	CR	AVE	1	2	3	4	5
(1) Market orientation	0.926	0.914	0.731	0.856	0.308	0.603	0.595	0.840
(2) Opportunity recognition	0.825	0.918	0.850	0.252	0.921	0.425	0.306	0.168
(3) Proactiveness	0.903	0.906	0.850	0.368	0.368	0.874	0.474	0.511
(4) Social innovation	0.713	0.860	0.825	0.474	0.208	0.378	0.869	0.593
(5) Value co-creation	0.858	0.877	0.705	0.754	0.152	0.461	0.457	0.857

Note: α -Cronbach Alpha; CR -Composite reliability; AVE -Average variance extracted. Bolded numbers are the square roots of AVE. Below the diagonal elements are the correlations between the constructs. Above the diagonal elements are the HTMT ratios.

4.2 Inner model evaluation

The structural model was assessed using the sign, magnitude, and significance of the structural path coefficients; the magnitude of R^2 value for each endogenous variable as a measure of the model's predictive accuracy; and the Stone-Geisser's Q^2 values as a measure of the model's predictive relevance (Hair et al., 2017). Potential collinearity between the latent constructs was assessed prior to examining path estimates. There were no issues as the VIF values ranged from 1.068 to 1.27, below the indicative critical value of 5 (Hair et al., 2017). The coefficient of the determination R^2 for the three endogenous variables of *proactiveness*, *social innovation*, and *co-creation* were 35.6%, 24.4%, and 57.0%, respectively. These values surpassed the threshold value of 10% (Falk and Miller, 1992). The Q^2 values for all endogenous variables (0.341, 0.217, and 0.566 respectively) were above zero and support the predictive relevance of the model. Bootstrapping with 5,000 subsamples was used to evaluate the significance of the parameter estimates (Hair et al., 2017).

The results in Table 2 show that *value co-creation* has a significant and positive relationship with *social innovation* ($\beta = 0.223$, $p < 0.05$), supporting H1. *Market orientation* has a significantly positive relationship with *value co-creation* ($\beta = 0.718$, $p < 0.000$) and *social innovation* ($\beta = 0.214$, $p < 0.05$). These results support H2 and H3, respectively. *Opportunity recognition* has a non-significant effect on *value co-creation* ($\beta = -0.049$, $p > 0.05$) and *social innovation* ($\beta = 0.074$, $p > 0.05$). Thus, H4 and H5 are unsupported. *Proactiveness* has a significant positive relationship with *value co-creation* ($\beta = 0.092$, $p < 0.05$), supporting H6. However, there was no significant relationship between *proactiveness* and *social innovation* ($\beta = 0.134$, $p > 0.05$), as such H7 was not supported (Table 2).

-----Insert Table 2 here-----

Table 2

Structural model assessment

Path	Path coefficient	Standard errors	<i>t</i> statistics	<i>p</i> values
Value co-creation → Social innovation	0.223	0.095	2.353	0.019
Market orientation → Value co-creation	0.718	0.058	12.438	0.000
Market orientation → Social innovation	0.214	0.104	2.063	0.039
Opportunity recognition → Value co-creation	-0.049	0.043	1.144	0.253
Opportunity recognition → Social innovation	0.074	0.057	1.290	0.197
Proactiveness → Value co-creation	0.092	0.047	1.963	0.048

Proactiveness → Social innovation	0.134	0.086	1.567	0.117
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To test the mediation hypotheses, we adopted Hair et al.'s (2017) recommendations and calculated the bootstrapping to test the significance of the indirect effects via the mediator (Preacher and Hayes, 2008).

-----Insert Table 3 here-----

Table 3
Bootstrap results for indirect effects.

Indirect effect	Estimate	Standard errors	<i>t statistics</i>	<i>p value</i>
Market orientation → Value co-creation → Social innovation	0.160	0.070	2.287	0.022
Opportunity recognition → Value co-creation → Social innovation	-0.011	0.011	0.958	0.338
Proactiveness → Value co-creation → Social innovation	0.020	0.014	1.414	0.157

Bootstrap results showed a positive and significant mediating effect for Market orientation → Value co-creation → Social innovation, supporting H8. However, H9 of our study- Value co-creation mediateing the relation between opportunity recognition and social innovation- was not supported. Our analysis also failed to support a mediating relationship for Proactiveness → Value co-creation → Social innovation (H10). (Table 3).

5. Discussion

Analysis of data collected from 221 tourism lifestyle entrepreneurs supports the importance of value co-creation and social innovation for the sustainability of both tourism enterprises and destinations. Expanding on theories on entrepreneurship and tourism, this study found that the level of ‘market orientation’ of TLEs has a direct and positive effect on value co-creation, as well as social innovation initiatives of the enterprise. These findings support and extend the extant literature including Chuang (2018), Liu and Huang (2020), and Gasparin et al. (2021). However, our analysis found no empirical evidence to support a direct and positive relationship between opportunity recognition- the process of identifying market needs through the creative combination of resources (Richards, 2011) - and value co-creation. While surprising, this may be caused by TLEs’ lack of organisational structures and that their opportunity recognition is the result of the businesses’ informal (as opposed to formal/structured) processes, therefore having a minimal effect on co-creation (Dias et al., 2021). Our hypothesis that opportunity recognition is a direct driver of social innovation was also unsupported, indicating that there are mediating and contextual factors that shape this relationship, such as knowledge assimilation (Dias et al., 2023; Hjalager et al., 2018).

H6 of our study expected a direct and positive relationship between TLE proactiveness- the implementation of activities aimed at identifying, tracking and monitoring changes in the business environment, consumer tastes and technological processes (Lumpkin & Dess, 2001) – and value co-creation (H6). This was indeed the case and in concordance with previous literature (Liu & Hang, 2020; Ratten et al., 2021). However, while proactiveness can drive co-creation, a significant direct effect on social innovation was not supported. Results also found that TLE proactiveness is an important antecedent of social innovation, providing further insights on this relationship as discussed by Moulaert et al. (2013).

Our analysis of the structural network also revealed important insights on the mediating effects of value co-creation. The evidence suggests that TLEs’ level of market orientation indirectly affects social innovation outcomes through the mediating effects of value co-creation. The stronger a TLE firm's market orientation, the more likely it is to co-create value and generate social innovation activities, such as improving service quality or developing new products and services that address social challenges. This presents new progress to the body of knowledge on tourism entrepreneurship, focusing beyond businesses’ financial performance and extending to the sustainability of tourism enterprises and destinations (Polese et al. 2018).

A further outcome of the study concerns the link between opportunity recognition - value co-creation - social innovation, which was unsupported from our analysis. The findings suggest that co-creation does not act as the primary mechanism for the integration of opportunity recognition in driving social innovation. This is a very important finding because it shows that social innovation is more closely associated with market orientation than co-creation, and that the entrepreneur's ability to identify new opportunities is essential.

Our empirical findings failed to support a mediator relationship among the proactiveness-value co-creation-social innovation chains. While this contrasts with previous studies (Renko et al., 2009; Sandberg, 2007;), our findings (also considering H7) suggest the need to further investigate this relationship in order to identify the possible presence of unexplored mediator and contextual drivers.

6. Post-hoc analysis - fsQCA

fsQCA was conducted as a follow-up procedure to explore combinations of variables that explain drivers of social innovation. fsQCA can determine the optimal combinations of variables and extract additional causal complexity insights by analyzing the partial influence of each variable on the other variables by means of logic of set theory (Misangyi et al., 2017). In this study, we assume that proactiveness, value co-creation, opportunity recognition, market orientation could be combined in multiple ways to achieve outcomes of high social innovation. Furthermore, we also considered causal asymmetry, meaning that the combinations for ‘high’ social innovation are not necessarily the opposite of the explanation for ‘low’ social innovation. As such, this study explores the combinations leading to high and low social innovations (\sim soi). Table 4 provides the fsQCA intermediate solution for high and low social innovation.

-----Insert Table 4 here-----

Table 4
Configurations for high and low social innovation.

	High social innovation	Low social innovation
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Configuration	(soi)				(~soi)		
	C1	C2	C3	C4	C5	C6	C7
Proactiveness	⊗		●	⊗	⊗		●
Value co-creation	●	●			⊗		⊗
Opportunity recognition		•				•	
Market orientation			•	⊗		⊗	•
Consistency	0.76	0.77	0.76	0.84	0.77	0.78	0.80
Raw coverage	0.46	0.57	0.66	0.56	0.45	0.37	0.30
Unique coverage	0.12	0.05	0.11	0.15	0.09	0.03	0.04
Overall solution consistency		0.76				0.77	
Overall solution coverage		0.85				0.76	

Notes: Large circles indicate core conditions and small circles peripheral conditions. Black circles ("●") indicate the "presence" of a condition, and circles with a cross-out ("⊗") indicate its "negation". Blank spaces in the configurations indicate "do not care".

Goodness-of-fit was tested by analyzing both consistency and coverage. First, the values of consistency for all individual configurations and for the overall solution were > 0.75 (Schneider & Wagemann, 2013). Second, unique coverage surpassed the threshold of zero for all configurations (Ragin, 2008). Thus, all configurations were empirically relevant. Based on these assumptions, the intermediate solution reveals three combinations for high social innovation, and four combinations for low social innovation.

Prior studies have established that TLEs are a heterogeneous group and can be segmented into several distinct subtypes (e.g., Carlsen et al., 2008; Dias et al., 2020; Dias et al., 2023; Zhang et al. 2021). This study sheds new light on the varied roles of co-creation in social innovation across different types of entrepreneurs. A closer look at the results reveals that *Configuration 1* consisted of a core variable (value co-creation) and the negation of a peripheral (proactiveness) variable and was devoid of opportunity recognition and market orientation. *Configuration 2* explained 57% of the variance in the result, combining value co-creation and opportunity recognition. In these two configurations, the results of PLS-SEM are confirmed regarding the key role of co-creation. Notably, however, each configuration includes two variables that were not directly related to social innovation (proactiveness and opportunity recognition in configurations 1 and 2, respectively). These results complement previous findings regarding the non-linear effect of opportunity recognition on innovation (Dias et al., 2020). They found the relationship to be quadratic, suggesting that the influence can be strong in some cases and weak in others. This study adds that opportunity recognition and proactiveness are only sufficient conditions for social innovation, meaning that they can lead to social innovation, but they are not necessary. *Configuration 3* showed coverage

of 66% with a combination of proactiveness and market orientation. Proactiveness is common across two configurations.

While PLS-SEM revealed the central role of value co-creation in enabling social innovation, fsQCA showed that this role is not uniform across all configurations, especially for Configuration 3 (high level of proactiveness and market orientation, being value co-creation and opportunity recognition absent). These findings highlight the role of co-creation in the social innovation process of TLEs, which allows for the empirical validation of previous studies reporting this relationship (c.f. Marchant & Mottiar, 2011; Zhang et al., 2021). Moreover, considering the intention to associate the business with a certain lifestyle, Thomas et al. (2011) and Wang et al. (2019a,b) recognize the willingness of these entrepreneurs to engage in a close relationship and to involve customers in the development of tourism experiences. Previous research also recognizes that place attachment is the basis of these entrepreneurs' competitiveness, and that effective communication and marketing is needed to access specific niches of tourists (Dias et al., 2023). This study shows that this market orientation is sufficient, although its effects should be complemented with value co-creation, suggesting that there is a need to reinforce marketing activities and more fine-tuned narratives as pointed out by Dias et al. (2020). This study expands on the existing understanding of co-creation's role in entrepreneurial social outcomes by linking it to social innovation, in addition to social self-efficacy (Sousa et al., 2023). In a reciprocal effect, social innovation allows these entrepreneurs to integrate more deeply into the community, giving them legitimacy to operate within it (McKeever et al., 2015), which reinforces the cycle by facilitating access to local resources and knowledge.

Considering the causal asymmetry associated with fsQCA analysis, four configurations were identified for low social innovation. *Configuration 4* is the opposite of C3 since a low degree of proactiveness and market orientation led to a low degree of social innovation. *Configuration 5* considers a low degree of proactiveness and a low degree of co-creation. *Configuration 6* indicated a high opportunity recognition combined with low market orientation. Finally, *Combination 7* is almost the opposite of C1 by combining high proactiveness and low value co-creation, however it also includes high market orientation. Configuration 6 stands out as the only non-symmetric configuration, extending existing knowledge by identifying a group of entrepreneurs who actively pursue new opportunities but are unable to adequately respond to social issues due to their lack of market orientation. More specifically, our study clarifies Su et al. (2021)'s

assumption about the changing emphasis on social objectives among TLEs. As they found, TLEs can alternate between a pure lifestyle orientation and a business orientation, leading to a more profit-driven enterprise in the latter case. Our research shows that this path may lead firms away from social innovation as a consequence of losing their market focus.

7. Conclusions

6.1. Theoretical contributions

This study contributes to understanding the processes that drive the social innovation practices of TLEs. In this context, social innovations are an outcome of tourism entrepreneurs' involvement with their local community, culture, food, traditions and way of life. Second, by identifying the processes leading to social innovation, this study validates the importance of value co-creation as an essential mechanism. In Portugal, certain co-created experiences have attracted growing interest such as totally immersive wine experiences where tourists pick their own grapes from the vines, and become active participants in the wine making process. Tourism entrepreneurs facilitate the experience for visitors to engage with the locals, learn about the traditions of the place, and to celebrate and preserve these traditions for future generations. Thus, this study advances our understanding the relationship between co-creation and business innovation (c.f. Yachin, 2019), demonstrating that innovations can take many forms and provide value to not only customer or business, but for the benefit of the local community.

Third, the configurations identified from the fsQCA enable a new typology of TLEs to be proposed. Previous studies have categorized tourism SMEs based on different orientations i.e. profit orientation versus lifestyle orientation (Zhang et al. 2021). Research has also identified different types of TLEs based on nuanced innovation (Dias et al. 2020), this study advances the field and presents new classifications of TLE behaviors based on co-creation characteristics (Figure 2).

-----Insert Figure 2 here-----

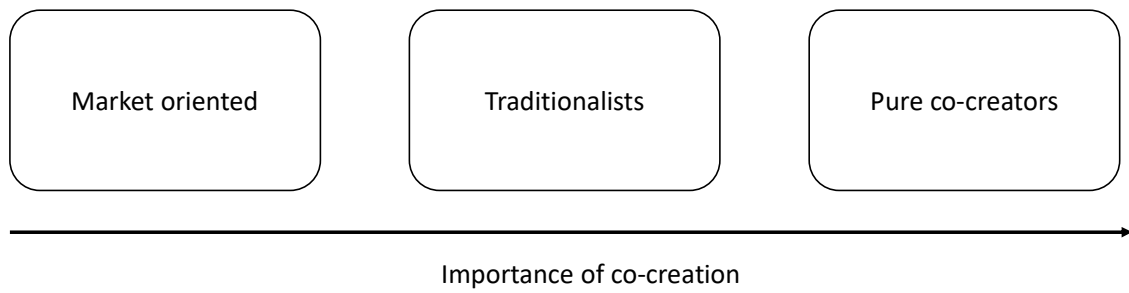


Figure 2. A typology of TLEs based on co-creation importance

The first level of the typology features *market-oriented* entrepreneurs. Marketing and communication are the main focus of market-oriented entrepreneurs, who do not engage in co-creation to respond to market needs and trends (this matches the C3 configuration). In this case, social innovation activities are the result of less customized solutions marketed through strong communication activities like social media posts or online advertising. The innovation generated is expected to be market-driven by following opportunities resulting from market trends. The *Traditionalists* in our typology focus exclusively on co-creation and do not show a strong propensity to match market trends and quickly adapt the firms' offering (corresponds to configuration C1). Social innovators are motivated to create immersive experiences that offer a way of life that is independent of trendy trends. *Pure co-creators* focus on offering tailor-made experiences based on the identification and capitalization of market opportunities, corresponding to configuration C2. Pure creators combine opportunity recognition and co-creation to generate social innovation, meaning they are actively searching for novelty in their tailor-made experiences. The involvement of local stakeholders to generate co-creative activities leads to more social and environmental experiences, but the need to cope with market trends brings some risks. In fact, the continuous creation of innovative experiences is dependent on the entrepreneur's social capital as it demands local stakeholders' involvement in new experiences (and eventually forcing the need for adaptation to market demands).

Finally, while previous research has focused on how relationships between tourism entrepreneurs and the local community can drive firm performance (see Hallak et al 2012), findings from this study extend beyond the financial aspects to inform the factors driving social innovation activities that are paramount for the sustainability of tourism

destinations, especially for rural and regional communities dependent on tourism activity. Thus, we present evidence that both TLEs' market orientation and value co-creation are imperative to generating social innovation, advancing the body of knowledge on tourism entrepreneurship and innovation processes.

6.2. Managerial implications

Understanding the drivers of social innovation presents implications for destination managers and Government in supporting sustainable tourism development, and aligns with UN Sustainable Development Goals of 'Industry, Innovation and Infrastructure', and 'Sustainable Cities and Communities' (UN Department of Economic and Social Affairs, 2023). The actions of TLEs are imperative for innovation and competitiveness of destinations and an understanding of the innovation processes can inform Government level initiatives that support capacity-building actions for the tourism industry. Supporting tourism firms to becoming increasingly market-orientation involves specific training and effective dissemination of pragmatic and relevant market information, especially in a post-pandemic context where there is much uncertainty about the evolution of tourist behavior. Moreover, policy frameworks that encourage a culture of innovation supported through co-creation, strengthen the local economy and facilitate responsible policy making for the benefit of all stakeholders. Social innovation and co-creation of tourism experiences are linked to branding and destination image, attracting high yield niche market segments and supporting the sustainability of destinations.

6.3. Limitations and future research

Data for this study came exclusively from Portuguese TLEs which may limit the generalisability of our findings. Thus, the network of relationships among market orientation, value co-creation, proactiveness, opportunity recognition and social innovation may vary across different industries or different contexts. Firm size is also a factor as it alters the dynamics of resource capabilities. Hence, future research should examine diverse types of tourism entrepreneurs and firms of different sizes, as well as the diverse characteristics of tourism entrepreneurs (e.g., their connection to place, business experience, and family dynamics). It is also imperative to note that data was collected in 2021 and at a time when tourism businesses were under great duress caused by the

pandemic. Consequently, new research is warranted to explore the model effects, as well as capturing TLE insights on resilience and business recovery, in a post-pandemic environment. .

Future research on innovation of tourism firm should also examine business model innovation (BMI) as business innovate themselves to cope and adapt to changing environments, as experienced during the pandemic, helping to strengthen business resilience (Breier et al 2021). Finally, while the study draws on theory to examine the predictors of social innovation, there are other variables not included in our model that warrant future investigation, specifically in regard to the entrepreneurial eco-system (see Bichler, Kallmuenzer and Peters, 2020) in which the entrepreneur is embedded. Finally, data analysing the impacts of TLEs 'social innovation activities on communities should be conducted over several time-points to empirically assess the cumulative result of implemented innovations on destination sustainability.

References

- Aksoy, L., Alkire, L., Choi, S., Kim, P. B., & Zhang, L. (2019). Social innovation in service: a conceptual framework and research agenda. *Journal of Service Management*, 30 (3), 429-448. <https://doi.org/10.1108/JOSM-11-2018-0376>
- Anderson, A. R., & Jack, S. L. (2002). The articulation of social capital in entrepreneurial networks: a glue or a lubricant?. *Entrepreneurship & Regional Development*, 14(3), 193-210. <https://doi.org/10.1080/08985620110112079>
- Andersson, A., Cederholm, E., & Hultman, J. (2010). The value of intimacy—negotiating commercial relationships in lifestyle entrepreneurship. *Scandinavian Journal of Hospitality and Tourism*, 10(1), 16-32. <https://doi.org/10.1080/15022250903442096>
- Angelkova, T., Koteski, C., Jakovlev, Z. and Mitrevska, E. (2012). Sustainability and competitiveness of tourism. *Social and Behavioral Sciences*, 44, 221-227. doi: 10.1016/j.sbspro.2012.05.023
- Anwar, M, Clauss, T., & Issah, W.B. (2022). Entrepreneurial orientation and new venture performance in emerging markets: the mediating role of opportunity recognition. *Review of Managerial Science*, 1-28. <https://doi.org/10.1007/s11846-021-00457-w>
- Ateljevic, I., & Doorne, S. (2000). 'Staying within the fence': Lifestyle entrepreneurship in tourism. *Journal of Sustainable Tourism*, 8(5), 378-392. <https://doi.org/10.1080/09669580008667374>
- Bachinger, M., Kofler, I., & Pechlaner, H. (2022). Entrepreneurial ecosystems in tourism: An analysis of characteristics from a systems perspective. *European Journal of Tourism Research*, 31, 3113. <https://doi.org/10.54055/ejtr.v31i.2490>
- Bagozzi, R.P., & Yi. Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Bichler, B. F., Kallmuenzer, A., & Peters, M. (2020). Entrepreneurial ecosystems in hospitality: The relevance of entrepreneurs' quality of life. *Journal of Hospitality and Tourism Management*, 44, 152–161. <https://doi.org/10.1016/j.jhtm.2020.06.009>
- Binkhorst, E., & Den Dekker, T. (2009). Agenda for co-creation tourism experience research. *Journal of Hospitality Marketing & Management*, 18(2-3), 311-327. <https://doi.org/10.1080/19368620802594193>

- Bosworth, G., & Farrell, H. (2011). Tourism entrepreneurs in Northumberland. *Annals of Tourism Research*, 38(4), 1474-1494. DOI: 10.1016/j.annals.2011.03.015
- Bredvold, R., & Skålén, P. (2016). Lifestyle entrepreneurs and their identity construction: A study of the tourism industry. *Tourism Management*, 56, 96-105. <https://doi.org/10.1016/j.tourman.2016.03.023>
- Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S., & Tiberius, V. (2021). The role of business model innovation in the hospitality industry during the COVID-19 crisis. *International Journal of Hospitality Management*, 92, 102723. <https://doi.org/10.1016/j.ijhm.2020.102723>
- Bulut, C, Eren, H, & Halac, D.S. (2013). Which one triggers the other? Technological or social innovation. *Creativity Research Journal*, 25(4), 436-445. <https://doi.org/10.1080/10400419.2013.843358>
- Carlsen, J., Morrison, A., & Weber, P. (2008). Lifestyle oriented small tourism firms. *Tourism Recreation Research*, 33(3), 255-263. <https://doi.org/10.1080/02508281.2008.11081549>
- Chang, S., Witteloostuijn, A. V., & Eden, L. (2010). From the editors: Common method variance in international research. *Journal of International Business Studies*, 41, 178-184. <https://doi.org/10.1057/jibs.2009.88>
- Cho, H.J., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26, 555-575. <https://doi.org/10.1002/smj.461>
- Chuang, S.H. (2018). Facilitating the chain of market orientation to value co-creation: The mediating role of e-marketing adoption. *Journal of Destination Marketing & Management*, 7, 39-49. <https://doi.org/10.1016/j.jdmm.2016.08.007>
- Cooper, C. (2015). Managing tourism knowledge. *Tourism Recreation Research*, 40(1), 107-119. <https://doi.org/10.1080/02508281.2015.1006418>
- Dahles, H., Khieng, S., Verver, M., & Manders, I. (2020). Social entrepreneurship and tourism in Cambodia: Advancing community engagement. *Journal of Sustainable Tourism*, 28(6), 816-833. <https://doi.org/10.1080/09669582.2019.1706544>
- De la Barre, S. (2013). Wilderness and cultural tour guides, place identity and sustainable tourism in remote areas. *Journal of Sustainable Tourism*, 21(6), 825-844. <https://doi.org/10.1080/09669582.2012.737798>
- Dias, Á., Cascais, E., Pereira, L., Lopes da Costa, R., & Gonçalves, R. (2022). Lifestyle entrepreneurship innovation and self-efficacy: Exploring the direct and indirect

- effects of marshaling. *International Journal of Tourism Research*, 24(3), 443-455. <https://doi.org/10.1002/jtr.2513>
- Dias, Á, González-Rodríguez, M.R., & Patuleia, M. (2021). Retaining tourism lifestyle entrepreneurs for destination competitiveness. *International Journal of Tourism Research*, 1-12. <https://doi.org/10.1002/jtr.2436>
- Dias, Á., & Patuleia, M. (2021). Commentary: Attitudes of Local Population of Tourism Development Impacts: Evidence from Czechia. *Frontiers in Psychology*, 3602. <https://doi.org/10.3389/fpsyg.2021.727287>
- Dias, Á, Silva, G.M, Patuleia, M., & González-Rodríguez, M.R. (2020). Transforming local knowledge into lifestyle entrepreneur's innovativeness: exploring the linear and quadratic relationships. *Current Issues in Tourism*, 1-17. <https://doi.org/10.1080/13683500.2020.1865288>
- Dias, Á., Silva, G. M., Patuleia, M., & González-Rodríguez, M. R. (2023). Developing sustainable business models: Local knowledge acquisition and tourism lifestyle entrepreneurship. *Journal of Sustainable Tourism*, 31(4), 931-950. <https://doi.org/10.1080/09669582.2020.1835931>
- Dwivedi, A., & Weerawardena, J. (2018). Conceptualizing and operationalizing the social entrepreneurship construct. *Journal of Business Research*, 86, 32–40. <https://doi.org/10.1016/j.jbusres.2018.01.053>
- Dwyer, L., Chen, N., & Lee, J. (2019). The role of place attachment in tourism research. *Journal of Travel & Tourism Marketing*, 36(5), 645-652. DOI: 10.1080/10548408.2019.1612824
- Edelman, L., & Yli-Renko, H. (2010). The impact of environment and entrepreneurial perceptions on venture-creation efforts: Bridging the discovery and creation views of entrepreneurship. *Entrepreneurship Theory and Practice*, 34(5), 833-856. <https://doi.org/10.1111/j.1540-6520.2010.00395.x>
- Eikhof, D. R., & Haunschild, A. (2006). Lifestyle meets market: Bohemian entrepreneurs in creative industries. *Creativity and Innovation Management*, 15(3), 234-241. <https://doi.org/10.1111/j.1467-8691.2006.00392.x>
- Falk, R.F., & Miller, N.B. (1992). *A primer for soft modelling*. Akron: University of Akron Press.
- Font, X., Garay, L., & Jones, S. (2016). A social cognitive theory of sustainability empathy. *Annals of Tourism Research*, 58, 65-80. <https://doi.org/10.1016/j.annals.2016.02.004>

- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 29-50. <https://doi.org/10.1177/002224378101800104>
- García-Rosell, J.C, Haanpää, M., & Janhunen, J. (2019). ‘Dig where you stand’: values-based co-creation through improvisation. *Tourism Recreation Research*, 44(3), 348-358. <https://doi.org/10.1080/02508281.2019.1591780>
- Gasparin, M., Green, W., Lilley, S., Quinn, M., Saren, M., & Schinckus, C. (2021). Business as unusual: A business model for social innovation. *Journal of Business Research*, 125, 698-709. <https://doi.org/10.1016/j.jbusres.2020.01.034>
- Gelhard, C, Kortmann, S., & Leker, J. (2014). *A contemporary view on market orientation and innovativeness: The mediating role of customer co-creation*. In ISPIM Conference Proceedings (p. 1). *The International Society for Professional Innovation Management (ISPIM)*.
- GEM (2022). Entrepreneurial Behaviour and Attitudes. Global Entrepreneurship Monitor. <https://www.gemconsortium.org/economy-profiles/portugal-2>, Accessed on June, 4th 2022.
- Grinstein, A. (2008). The effect of market orientation and its components on innovation consequences: a meta-analysis. *Journal of the Academy of Marketing Science*, 36(2), 166-173. <https://doi.org/10.1007/s11747-007-0053-1>
- Hair Jr, J.F, Hult, G.M, Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling*. Sage Publications.
- Hallak, R., Assaker, G., & Lee, C. (2015). Tourism entrepreneurship performance: The effects of place identity, self-efficacy, and gender. *Journal of Travel Research*, 54(1), 36-51. <https://doi.org/10.1177/0047287513513170>
- Hallak, R., Assaker, G., & O’Connor, P. (2014). Are Family and Nonfamily Tourism Businesses Different? An Examination of the Entrepreneurial Self-Efficacy–Entrepreneurial Performance Relationship. *Journal of Hospitality & Tourism Research*, 38(3), 388–413. <https://doi.org/10.1177/1096348012461545>
- Henseler, J, Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>

- Hjalager, A.M, Kwiatkowski, G., & Østervig Larsen, M. (2018). Innovation gaps in Scandinavian rural tourism. *Scandinavian Journal of Hospitality and Tourism*, 18(1), 1-17. <https://doi.org/10.1080/15022250.2017.1287002>
- Hoarau, H. (2014). Knowledge acquisition and assimilation in tourism-innovation processes. *Scandinavian Journal of Hospitality and Tourism*, 14(2), 135-151. <https://doi.org/10.1080/15022250.2014.887609>
- Hughes, M., & Morgan, R.E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36, 651–661. <https://doi.org/10.1016/j.indmarman.2006.04.003>
- Ioannides, D., & Petersen, T. (2003). Tourism ‘non-entrepreneurship’ in peripheral destinations: a case study of small and medium tourism enterprises on Bornholm, Denmark. *Tourism Geographies*, 5(4), 408-435. <https://doi.org/10.1080/1461668032000129146>
- Joshi, M. P., Das, S. R., & Mouri, N. (2015). Antecedents of innovativeness in technology-based services (TBS): peering into the black box of entrepreneurial orientation. *Decision Sciences*, 46(2), 367-402.
- Kallmuenzer, A. (2018). Exploring drivers of innovation in hospitality family firms. *International Journal of Contemporary Hospitality Management*, 30(3), 1978–1995. <https://doi.org/10.1108/IJCHM-04-2017-0242>
- Keskin, H. (2006). Market orientation, learning orientation, and innovation capabilities in SMEs: An extended model. *European Journal of Innovation Management*, 9(4), 396-417. <https://doi.org/10.1108/14601060610707849>
- Killa, M. F. (2014). Effect of entrepreneurial innovativeness orientation, product innovation, and value co-creation on marketing performance. *Journal of Research in Marketing*, 2(3), 198-204. doi: 10.17722/jorm.v2i3.73
- Kreiser, P. M., Marino, L. D., Kuratko, D. F., & Weaver, K. M. (2013). Disaggregating entrepreneurial orientation: the non-linear impact of innovativeness, proactiveness and risk-taking on SME performance. *Small Business Economics*, 40(2), 273-291. <https://doi.org/10.1007/s11187-012-9460-x>
- Liu, C.H.S., & Huang, C.E. (2020). Discovering differences in the relationship among social entrepreneurial orientation, extensions to market orientation and value co-creation-The moderating role of social entrepreneurial self-efficacy. *Journal of*

- Hospitality and Tourism Management*, 42, 97-106.
<https://doi.org/10.1016/j.jhtm.2019.12.002>
- Lumpkin, G.T, Brigham, K.H., & Moss, T. W. (2010). Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship & Regional Development*, 22(3-4), 241-264.
<https://doi.org/10.1080/08985621003726218>
- Lumpkin, G.T., & Dess, G.G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16 (5), 429-451.
[https://doi.org/10.1016/S0883-9026\(00\)00048-3](https://doi.org/10.1016/S0883-9026(00)00048-3)
- Lundberg, C., Fredman, P., & Wall-Reinius, S. (2014). Going for the green? The role of money among nature-based tourism entrepreneurs. *Current Issues in Tourism*, 17(4), 373-380. <https://doi.org/10.1080/13683500.2012.746292>
- Lusch, R. F., & Vargo, S. L. (2018). *An overview of service-dominant logic*. In Vargo, S.L. and Lusch, R.F. (Eds), *The Sage Handbook of Service-Dominant Logic* (pp. 3-21), Sage Publications, London.
- Marchant, B., & Mottiar, Z. (2011). Understanding lifestyle entrepreneurs and digging beneath the issue of profits: Profiling surf tourism lifestyle entrepreneurs in Ireland. *Tourism Planning & Development*, 8(2), 171-183.
<https://doi.org/10.1080/21568316.2011.573917>
- Mathis, E. F., Kim, H.L., Uysal, M., Sirgy, J.M., & Prebensen, N. K. (2016). The effect of co-creation experience on outcome variable. *Annals of Tourism Research*, 57, 62-75. <https://doi.org/10.1016/j.annals.2015.11.023>
- McKeever, E., Jack, S., & Anderson, A. (2015). Embedded entrepreneurship in the creative re-construction of place. *Journal of Business Venturing*, 30(1), 50-65.
<https://doi.org/10.1016/j.jbusvent.2014.07.002>
- McKelvey, M., & Zaring, O. (2018). Co-delivery of social innovations: Exploring the university's role in academic engagement with society. *Industry and Innovation*, 25(6), 594-611. <https://doi.org/10.1080/13662716.2017.1295364>
- Meek, W. R., Pacheco, D. F., & York, J. G. (2010). The impact of social norms on entrepreneurial action: Evidence from the environmental entrepreneurship context. *Journal of Business Venturing*, 25(5), 493-509.
<https://doi.org/10.1016/j.jbusvent.2009.09.007>

- Mirvis, P., Herrera, M. E. B., Googins, B., & Albareda, L. (2016). Corporate social innovation: How firms learn to innovate for the greater good. *Journal of Business Research*, 69(11), 5014-5021. <https://doi.org/10.1016/j.jbusres.2016.04.073>
- Misangyi, V. F., Greckhamer, T., Furnari, S., Fiss, P. C., Crilly, D., & Aguilera, R. (2017). Embracing causal complexity: The emergence of a neo-configurational perspective. *Journal of Management*, 43(1), 255-282. DOI: 10.1177/0149206316679252
- Mohammadi, N., & Heshmati, S. (2021). Entrepreneurial opportunity recognition: a bibliometric overview and clustering analysis. *World Journal of Science, Technology and Sustainable Development*, 18(3), 239-258. <https://doi.org/10.1108/WJSTSD-04-2021-0042>
- Mottiar, Z. (2007). Lifestyle entrepreneurs and spheres of inter-firm relations: The case of Westport, Co Mayo, Ireland. *The International Journal of Entrepreneurship and Innovation*, 8(1), 67-74. <https://doi.org/10.5367/000000007780007326>
- Moulaert, F., MacCallum, D., & Hillier, J. (2013). The international handbook on social innovation: Collective action, social learning and transdisciplinary research. Northampton: Edward Edgar Publishing
- Newman, A, Prajogo, D., & Atherton, A. (2016). The influence of market orientation on innovation strategies. *Journal of Service Theory and Practice*, 26(1), 72-90. <https://doi.org/10.1108/JSTP-02-2015-0044>
- Ngah, R., Sarmidy, R., & Abd Halil, N. H. (2020). Implications of generic skills on innovative behavior towards opportunity recognition in youth. *Research in World Economy*, 11(1), 123-129. <https://doi.org/10.5430/rwe.v11n1p123>
- O'Cass, A., & Ngo, L. V. (2012). Creating superior customer value for b2b firms through supplier firm capabilities. *Industrial Marketing Management*, 41(1), 125-135. <https://doi.org/10.1016/j.indmarman.2011.11.018>
- Pee, L.G. (2016). Customer co-creation in B2C e-commerce: does it lead to better new products? *Electronic Commerce Research*, 16(2), 217-243. <https://doi.org/10.1007/s10660-016-9221-z>
- Pelham, A.M., & Wilson, D.T. (1996). A longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimension of small-firm performance. *Journal of the Academy of Marketing Science*, 24(1), 27-43. <https://doi.org/10.1007/BF02893935>
- Peters, M., & Kallmuenzer, A. (2018). Entrepreneurial orientation in family firms: The case of the hospitality industry. *Current Issues in Tourism*, 21(1), 21-40.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544. <https://doi.org/10.1177/014920638601200408>
- Pol, E., & Ville, S. (2009). Social innovation: Buzz word or enduring term?. *The Journal of Socio-Economics*, 38(6), 878-885. <https://doi.org/10.1016/j.socec.2009.02.011>
- Polese, F, Botti, A, Grimaldi, M, Monda, A., & Vesci, M. (2018). Social innovation in smart tourism ecosystems: How technology and institutions shape sustainable value co-creation. *Sustainability*, 10(1), 140. <https://doi.org/10.3390/su10010140>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. doi: 10.3758/BRM.40.3.879
- Ragin, C.C. (2008). *Redesigning Social Inquiry: Fuzzy Sets and Beyond*; University of Chicago Press: Chicago, IL, USA.
- Ratten, V., da Silva Braga, V. L., & da Encarnação Marques, C. S. (2021). Sport entrepreneurship and value co-creation in times of crisis: The covid-19 pandemic. *Journal of Business Research*, 133, 265-274. <https://doi.org/10.1016/j.jbusres.2021.05.001>
- Renko, M., Carsrud, A., & Brännback, M. (2009). The effect of a market orientation, entrepreneurial orientation, and technological capability on innovativeness: A study of young biotechnology ventures in the United States and in Scandinavia. *Journal of Small Business Management*, 47(3), 331-369.
- Richards, G. (2011). Creativity and tourism: The state of the art. *Annals of Tourism Research*, 38(4), 1225-1253. <https://doi.org/10.1016/j.annals.2011.07.008>
- Ringle, C.M, Wende, S., & Becker, J.M. (2015). *SmartPLS3.0*. Hamburg:www.smartpls.de.
- Rypestøl, J. O., & Aarstad, J. (2018). Entrepreneurial innovativeness and growth ambitions in thick vs. thin regional innovation systems. *Entrepreneurship & Regional Development*, 30(5-6), 639-661. DOI: 10.1080/08985626.2018.1444104

- Saarijärvi, H, Kannan, P.K., & Kuusela, H. 2013. Value co-creation: theoretical approaches and practical implications. *European Business Review*, 25(1), 6-19. <https://doi.org/10.1108/09555341311287718>
- Sandberg, B. (2007). Customer-related proactiveness in the radical innovation development process. *European Journal of Innovation Management*, 10 (2), 252-267. <https://doi.org/10.1108/14601060710745288>
- Schilar, H., & Keskitalo, E. (2018). Tourism activity as an expression of place attachment–place perceptions among tourism actors in the Jukkasjärvi area of northern Sweden. *Scandinavian Journal of Hospitality and Tourism*, 18(sup1), 42-59. <https://doi.org/10.1080/15022250.2017.1389123>
- Schneider, C. Q., & Wagemann, C. (2013). Doing justice to logical remainders in QCA: Moving beyond the standard analysis. *Political Research Quarterly*, 211-220. <https://doi.org/10.1177/1065912912468269h>
- Shaw, G., & Williams, A. (2009). Knowledge transfer and management in tourism organisations: An emerging research agenda. *Tourism Management*, 30(3), 325-335. <https://doi.org/10.1016/j.tourman.2008.02.023>
- Spanos, Y. E., & Lioukas, S. (2001). An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22(10), 907-934. DOI: 10.1002/smj.174
- Sousa, L., Dias, A. L., & Pereira, L. F. (2023). The determinants of social self-efficacy of tourism lifestyle entrepreneurs. *International Journal of Tourism Research*. 25(4), 429-441. <https://doi.org/10.1002/jtr.2580>
- Thomas, R., Shaw, G., & Page, S. (2011). Understanding small firms in tourism: A perspective on research trends and challenges. *Tourism Management*, 32(5), 963-976. <https://doi.org/10.1016/j.tourman.2011.02.003>
- Turismo de Portugal (2022). Overview. https://www.turismodeportugal.pt/en/Turismo_Portugal/visao_geral/Pages/default.aspx, Accessed on June, 4th 2022.
- Valtonen, A. (2009). Small tourism firms as agents of critical knowledge. *Tourist Studies*, 9(2), 127-143. <https://doi.org/10.1177/1468797609360600>
- Van Wijk, J., Zietsma, C., Dorado, S., De Bakker, F. G., & Marti, I. (2019). Social innovation: Integrating micro, meso, and macro level insights from institutional theory. *Business & Society*, 58(5), 887-918. DOI: 10.1177/0007650318789104

- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10. <https://doi.org/10.1007/s11747-007-0069-6>
- Wang, S, Hung, K., & Huang, W. J. (2019a). Motivations for entrepreneurship in the tourism and hospitality sector: A social cognitive theory perspective. *International Journal of Hospitality Management*, 78, 78-88. <https://doi.org/10.1016/j.ijhm.2018.11.018>
- Wang, C., Li, G., & Xu, H. (2019b). Impact of lifestyle-oriented motivation on small tourism enterprises' social responsibility and performance. *Journal of Travel Research*, 58(7), 1146-1160. <https://doi.org/10.1177/0047287518800389>
- Yachin, J.M. (2019). The entrepreneur-opportunity nexus: Discovering the forces that promote product innovations in rural micro-tourism firms. *Scandinavian Journal of Hospitality and Tourism*, 19(1), 47-65. <https://doi.org/10.1080/15022250.2017.1383936>
- Yan, W., Lei, R., & Keye, L. (2019, May). Sustainability-oriented social innovation design: The value of Co-creation. In 2019 IEEE Eurasia Conference on Biomedical Engineering, Healthcare and Sustainability (ECBIOS) (pp. 162-165). IEEE. <https://doi.org/10.1109/ECBIOS.2019.8807812>
- Yen, C.H, Teng, H.Y., & Tzeng, J.C. (2020). Innovativeness and customer value co-creation behaviors: Mediating role of customer engagement. *International Journal of Hospitality Management*, 88, 102514. <https://doi.org/10.1016/j.ijhm.2020.102514>
- Yousaf, Z. (2021). Go for green: green innovation through green dynamic capabilities: accessing the mediating role of green practices and green value co-creation. *Environmental Science and Pollution Research*, 28(39), 54863-54875. <https://doi.org/10.1007/s11356-021-14343-1>
- Zhang, T. (2019). Co-creating tourism experiences through a traveler's journey: a perspective article. *Tourism Review*. 75(1), 56-60. <https://doi.org/10.1108/TR-06-2019-0251>
- Zhang, H., Lu, L., & Sun, F. (2021). Changing role of lifestyle in tourism entrepreneurship: Case study of Naked Retreats Enterprise. *Tourism Management*, 84, 104259. <https://doi.org/10.1016/j.tourman.2020.104259>
- Zhang, J., & Zhu, M. (2016). Market orientation, product innovation and export performance: evidence from Chinese manufacturers. *Journal of Strategic Marketing*, 24(5), 377-397. DOI: 10.1080/0965254X.2015.1052538

