



Local Knowledge Management and Innovation Spillover: Exploring Tourism Entrepreneurship Potential

Álvaro Lopes Dias, Universidade Lusofano, Portugal & ISCTE, Lisbon University Institute, Portugal*


 <https://orcid.org/0000-0003-4074-1586>

Marta Figueiredo Marques Gomes, Instituto Superior de Gestão, Portugal

Leandro Pereira, ISCTE, Lisbon University Institute, Portugal

 <https://orcid.org/0000-0002-4920-0498>

Renato L. Costa, ISCTE, Lisbon University Institute, Portugal

 <https://orcid.org/0000-0001-9364-534X>

ABSTRACT

Tourism lifestyle entrepreneurs play an essential role in the innovation and competitiveness of tourist destinations. However, existing knowledge about the determinants of the innovation they generate is far from being fully exploited. There is still little knowledge about the innovation spillover effect, which is a determining factor for the destination's competitiveness. One of the key factors for innovation results from local knowledge management and the ability of tourism lifestyle entrepreneurs to turn this knowledge into innovation. To test the role of knowledge management in innovation and spillover, a survey was conducted on a sample of 115 tourism lifestyle entrepreneurs, with the hypotheses tested using structural equations. The results reveal that place attachment and knowledge acquisition have a direct effect on knowledge assimilation and community-centered strategy. Furthermore, it was also found that community-centered strategy and knowledge assimilation play a mediating role between place attachment and innovation capacity.

KEYWORDS

Creative Tourism, Creativity, Entrepreneurship, Innovation, Innovation Spillover, Knowledge Management, Local Development, PLS

1. INTRODUCTION

Research in tourism has paid little attention to tourism lifestyle entrepreneurs (TLEs) (Zhang, Xiao, & Rao, 2015). However, for several reasons these entrepreneurs require more attention. First, considering that small and medium-sized enterprises represent the majority of tourist businesses, a very significant part of these small scale businesses are run by TLEs (Cooper, 2015). Second, TLEs businesses are more sustainable businesses when compared with large firms (Shrivastava & Kennelly, 2013; Pereira et al., 2021a; Pereira et al., 2021b). Third, these businesses play an important role on the destination innovation (Bosworth & Farrell, 2011; Dias, González-Rodríguez & Patuleia, 2021a). Despite this

DOI: 10.4018/IJSSMET.298671

*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

importance, little is known about the antecedents of this innovative capacity and how it is spread within the destination to generate the spillover effect (Hoarau, 2014).

Furthermore, local knowledge plays an important role on TLEs innovation and competitiveness because it is tacit and difficult to imitate (Shrivastava & Kennelly, 2013; Dias et al., 2020b), and a basis for TLEs differentiation (Yachin, 2019). As such, the way local knowledge is acquired and assimilated and transformed into innovation is equally important to explore, and extend existing knowledge: pertaining to TLEs business models. Although the importance of the place in the experiences offered by entrepreneurs has already been identified (Yachin, 2019; Srivastava, 2021), its implications of place attachment on innovation are not totally identified. On the other hand, although Zhang et al. (2015) have analysed the innovation spillover effect in the context of TLEs, the antecedents of this spillover are still to be explored, since the recognition of these factors represents an important knowledge for the tourism destinations' competitiveness. As such, the main objectives of this study are threefold. First, this study aims to analyze the contribution of knowledge management to the innovation capacity of the TLEs and to the innovation spillover effect. Second, the study aims at understanding the influence of TLEs place attachment on the innovation capacity. This article explores an important topic for the tourism destinations' competitiveness from the perspective of lifestyle entrepreneurs. Despite its importance (in number, innovation and sustainability), this remains an under-explored topic. Third, this article deals with tacit local knowledge, an insufficiently developed topic (Zhang et al., 2015).

In order to bridge the abovementioned gaps in the tourism literature, this present study aims to explore the antecedents of entrepreneurial innovation and innovation spillover by perceiving the dynamics of knowledge management and place attachment. This research employs a quantitative approach analyzing the relationships between knowledge acquisition and place attachment in entrepreneurial innovation and innovation spillover, as well as the mediating role of community-centered strategies and knowledge assimilation in the same relations (Dias, González-Rodríguez & Patuleia, 2020). As this subject is yet under-explored in the literature, the determination of these relationships constitutes important contributions of this study.

This study is divided into four more sections. The second section includes the literature review, revealing the essential concepts to retain for the understanding of the study, followed by previously studied observations on the subject and finally the conceptual model chosen for its demonstration. The third section is focused on the methodology, thus indicating in a simple way which methodology was used in this study. The fourth is based on statistical analysis and discussion of the results obtained through it. Finally, an overall reflection of the conclusions, and practical implications are presented, as well suggestions for future research.

2. THEORETICAL BACKGROUND

2.1 Innovation Capability and Innovation Spillover

The role of innovation in tourism implies the development of new and unique cultural-based tourism products; events or shows; and creative urban spaces (Hoarau, 2014). Encouraging networking to increase synergies between tourism and creative industries is a significant consideration regarding creative tourism products and spaces (Booyens & Rogerson, 2015; Trad, 2021). Innovation in the reality of small tourism entrepreneurs has become increasingly relevant over the years, and this process occurs when one company has successfully implemented/applied new ideas (Yachin, 2019). As the rate of innovation capacity in this type of small-scale businesses is considered low when compared with other sectors (Cooper, 2015; Dias et al., 2020a), innovation is a condition for local development (Yachin, 2019; Windasari and Lin, 2021).

The client is one important innovation trigger, underlining the importance of understanding their needs (Hjalager, et al., 2017). From a tourism perspective, it is necessary for the entrepreneur to develop products and services based on the local culture (Booyens & Rogerson, 2015), therefore, the community constitutes a very valuable resource (Czernek, 2014).

In creative tourism it is also common to refer to collaborative innovation, which enables TLEs to develop strategies, thus continuously increasing the capacity for innovation, through theoretical sharing (Marasco, Martino, Magnotti, & Morvillo, 2018; Dias et al., 2021c; Dias et al., 2021d) This requires sharing an economy where innovation and creativity will have a major impact on the tourism and hospitality industry (Wang et al., 2019).

Facilitating local knowledge sharing has always been of great interest to entrepreneurs, and knowledge of interest to entrepreneurs is therefore tacit knowledge (Hoarau, 2014), so there is sharing of experience and know-how (Panahi, Watson, & Partridge, 2013). According to Panahi et al. (2013), tacit knowledge can be divided into two distinct dimensions, these being the technical dimension and the cognitive dimension. The technical dimension is characterized by informal knowledge as well as by technical capabilities (operational part of the work such as performing tasks) while the cognitive dimension is characterized by being the emotional part (social ability to interact in order to obtain knowledge) associated with the (Leonard & Insch, 2005).

The innovation spillover effect of knowledge occurs when there is a transfer of knowledge between two parties, although unintentional, which reveals its particularity, since no deliberate action is taken (Ferreira, Ratten, & Dana, 2016). Such knowledge transfer can have various types of utility at strategic levels (Ferreira, et al., 2016) with less associated costs and efforts. Nonaka and Takeuchi (1995) created a model that reflects the four possible ways of transferring knowledge, either tacit or explicit:

Several tools facilitate TLEs tacit knowledge acquisition, such as the organisation of informal gatherings, parties and the participation in events which allow the contact with other entrepreneurs (Hoarau, 2014), thus as a consequence, tourism innovations are likely to be propagated among companies offering similar products and services within a region; such a process is also identified as the overflow of tacit knowledge (Zhang, et al., 2015). Thus, in order to obtain tacit knowledge, it is important to be embedded in the local context where knowledge is located so that it can be transferred and shared (Hoarau, 2014), enabling innovation spillover (Zhang, et al., 2015).

2.2 Research Hypothesis

Researchers have recognised that generating and using (assimilating) new knowledge from external sources is an important predictor on innovation capacity (Hoarau, 2014). The lack of knowledge management abilities (Yachin, 2019) is considered a barrier to innovation and competitiveness (Avdimiotis, 2012; Dias et al., 2021b). Furthermore, as the TLEs business grows, the need to absorb even more external knowledge also increases, due to the continuing lack of innovation (Marasco, et al., 2018).

Local knowledge acquisition corresponds to the first phase of identifying market opportunities (Berghman, et al., 2013). Proactivity is one approach to knowledge acquisition, as well processing knowledge based on previous experiences (the ability to adapt knowledge to the present reality), and the ability to integrate external knowledge. All these abilities are related to the entrepreneur's social skills (Yachin, 2019). Thus, for this type of entrepreneurs socialization is of extreme importance allowing values and experiences sharing (García-Villaverde, 2018) in their daily life activities (Lai, Morrison-Saunders, & Grimstad, 2017).

Tacit knowledge results from the entrepreneur's own experience, and is constantly evolving (Avdimiotis, 2012). Therefore, it is difficult to imitate and transmit (Zhang, Xiao, & Rao, 2015). According to Zhang, et al. (2015), is strongly linked to emotions and experiences and cannot be found decoded in written form, since it comes from the subconscious which makes it impossible to transmit (Avdimiotis, 2012). What makes tacit knowledge different from explicit knowledge is that the latter refers to the type of knowledge that is absorbed in code, using language that facilitates its own communication, is significantly easy to decode and can be easily understood in written form (Zhang, et al., 2015).

Although knowledge can be considered the engine of TLEs competitiveness, according to Hoarau (2014), they can also face several barriers in the attempt to acquire it since the knowledge

considered rich in this industry is tacit knowledge, which is quite difficult to imitate, and this type of knowledge is based on physical experiences, sensations, ideas, and mental models, and therefore cannot be transmitted as explicit knowledge (Zhang, et al., 2015). Thus:

- H1:** Local knowledge acquisition is positive and directly related with local knowledge assimilation.
- H2:** Local knowledge acquisition is positive and directly related to community-centered strategies.
- H3:** Local knowledge assimilation is positive and directly related to the innovation capacity.
- H4:** Local knowledge assimilation mediates the relation between local knowledge acquisition and the innovation capacity.

Lifestyle-oriented entrepreneurs, instead of having a formal business whose profits and economic growth as main indicators, they also have different motivations such as environmental or social goals (Wang, Hung, & Huang, 2019). Thus, in order to study the motivations TLEs, Wang, et al. (2019) argue that these entrepreneurs are led by a business model involving local people, personal interest and community encouragement, thus making the local community an important element. In this vein, stakeholder cooperation is key, relieving the community as core strategic focus, leading to social and cultural understanding that can result in a more effective tourism business (Engeset & Heggem, 2015; Choi, 2021). These small-scale tourism firms are essential to offer experiences based on the local community, obtaining income and above all, creating local employment (Yachin, 2019). Furthermore, the local community is often dependent on relationships with other local businesses, making it beneficial for TLEs to carry out activities that have local social benefits (Hallak, Brown, & Lindsay, 2012). To create a synergic effect, this type of socialization should be fostered within local and other destination communities (Hjalager, Kwiatkowski, & Ostervif, 2017). Furthermore, this type of external alliances can also trigger destination modernization (Hjalager et al., 2017).

TLEs embeddedness in the community leads to a stronger connection with local stakeholders (Yachin, 2019). Hence, there is a sense of cooperation within the community (Engeset et al., 2015), which ends up being a motivating factor for it, due to local job creation as well as the high wages and monetary rewards that result from it (Buckley & Ollenburg, 2013). Local residents play a key role in tourism experiences (Buckley, et al., 2013; Daly et al., 2021), as social embedding can have a positive impact because interpersonal relationships can develop along the way, thus becoming a valuable resource based on trust and knowledge (Czernek, 2014). The knowledge of these local residents is translated into specific skills and can then become a resource for TLES, as the community is also motivated through increased local employment, financial rewards and, in some cases, local residents seek assistance and help to create their own businesses within this industry (Buckley, et al., 2013).

According to Czernek (2014), local residents are great sources of information because: they are aware of how the local market works and what it is that makes them perceptible for the recognition of market opportunities; they know the limitations of the place well, comprehend the available resources and the concrete potential of the place. Thus, Czernek (2014) states that entrepreneurs who are deeply embedded in the community are better able to quickly convince others of their activity. As such:

- H5:** Community-centered strategies are positive and directly related to innovation capacity.
- H6:** Community-centered strategies mediates the relation between local knowledge acquisition and innovation capacity

Place attachment can be defined as an affective link between an individual and a specific environment (Prayag & Ryan, 2011). This environment involves humans, animals, private objects, brands, destinations and special places (Loureiro, 2014). The interaction between individuals and the specific environment is not enough to create the place attachment, because it is through involvement

between people, and between people and the place, that emotional affective links are formed (Prayag & Ryan, 2011).

Entrepreneurial practices in small rural tourism enterprises, according to Lang et al., (2013) go through local soaking in order to create favorable environments for their existence. The main objective of tourists visiting this type of place is to feel that they belong to that place, developing a connection to it and integrating themselves in the community (Lai, et al., 2017) as if they were part of it. Thus, it is also the entrepreneur's goal to create an environment where she/he feels safe and where she/he also feels he belongs physically and socially (Hallak et al., 2012).

The memorable experiences are associated with the strong emotions felt at the time of the experience and have the ability to influence the feeling of connection to the place, as well as the fact that there is a desire to return, the need to share experiences with people close to us and the desire to "pass the word" in order to recommend the destination (Loureiro, 2014).

According to Prayag and Ryan (2011), the sense of place attachment can be studied in two different dimensions, the first being the place identity, referring to the strong emotional connection of the individual to the place and its components. The second dimension is more functional, related to a certain business objective, which can be better achieved through the place elements. According to Loureiro (2014), the place attachment is defined as an affective bond between an individual and a specific environment, and in this peculiar environment, the feeling of connection can be felt between humans and animals, or to specific objects and places. Thus, the place is mentally related to a feeling of special attachment, self-identity, interpersonal relationships (Hallak et al., 2012; Al-Haraisa, et al., 2021) and the community (Lai et al., 2017), as it is also essential for the TLEs to create a specific relationship with the community because the community is a key factor in creating a successful tourist destination (Hallak, et al., 2012). Thus, we hypothesize:

H7: Place attachment is positive and directly related to community-centered strategies.

H8: Community-centered strategy mediates the relation between the place attachment and innovation capacity.

Knowledge assimilation is the second dimension of the absorptive capacity, and is defined as the ability to absorb knowledge from an external source (Berghman, et al., 2013), interconnecting it with the existing knowledge base, in order to create something unique and innovative, thus contributing to the competitive advantage (Hoarau, 2014). Thus, it is necessary to assimilate knowledge from external sources by obtaining new interpretations of reality and produce critical reflections on clients, markets, processes, internal organization, and the marketing approach (Berghman, et al., 2013; Sawhney, and Ahuja, 2021).

The assimilation capacity contains several factors: the assimilation of knowledge and therefore innovation; human resources; industrial benchmarking; and finally the dissemination and distribution of the same (Hoarau, 2014). As explained by Hoarau (2014), knowledge assimilation and innovation refers to the phase of integration and fusion of new knowledge with the existing knowledge stock. Given its peculiar nature, tacit knowledge is not easily transferred, thus existing in the individual subconscious, although it is possible to draw several benefits from it, such as the fact that the knowledge acquired is passed on to local residents encouraging them and offering them the certainty that their business will work well (Czernek, 2014). Although tourism innovations have a certain degree of difficulty in developing and integrating, they are somewhat easy to imitate, and it is possible to have visibility over processes, thus enhancing the innovation spillover effect (Zhang et al., 2015). Accordingly we hypothesize:

H9: Local knowledge assimilation is positively and directly related with innovation spillover effect.

H10: Local knowledge assimilation mediates the relation between local knowledge acquisition with innovation spillover effect.

3. METHOD

3.1 Research Design

Given the problem of this study, it was considered that the most appropriate methodology to be used will be based on a quantitative approach, encompassing quantitative methods in the analysis and discussion of the results obtained. This methodological approach is found to be adequate to test complex models (Dias et al., 2020b) and aligns with previous research in the field of entrepreneurship in tourism (c.f. Dias et al., 2020b; Dias et al., 2021a).

The target population was selected using as inclusion criteria the following characteristics: having a local business related to tourism; independently run business and having other objectives than financial (to be considered TLEs). In order to guarantee security and trust, total confidentiality and anonymity of the answers to the respondents were promised. The questionnaire has a total of 22 questions, of which the first three refer to a small individual characterization of the individual, questioning the gender, analyzing the level of partnerships that the respondents have with entrepreneurs from other places and finally, the number of years that they are exercising the activity in the place where they are currently. The questionnaire obtained a total of 115 answers from Portuguese and Spanish TLEs.

3.2 Measures

TLEs local knowledge acquisition is measured with a four-item measure. Local knowledge assimilation was assessed using a two-item scale, both adopted from Jansen, Van Den Bosch and Volberda's (2005) measures.

TLEs place attachment was measure using a four-item adapted from Lalli (1992). Hallak et al. (2012) work provided a measure for community-centered strategy. To evaluate the innovation capability of the respondents, four questions were asked to understand their perceptions, adapted from Kropp, Lindsay, and Shoham (2006) and finally, to measure spillover effect, three questions were asked, adapted from McGee, Peterson and Sequeira (2009). For all the constructs, a 7-point Likert-type scale was used (1= totally disagree; 7= totally agree).

4. RESULTS

4.1. Assessment of Model Quality

In order to validate the study in question, the results obtained will be analysed. Smart-PLS was used to test the model, which is considered to be very useful for management models including competitive advantage resources, strategy, and entrepreneurial innovation (Richter, et al., 2015).

In a first stage, analyses considered important were carried out in order to validate the evaluation quality of the model, these being the analysis of reliability, convergent validity, reliability of internal consistency and discriminatory validity (Hair, et al., 2016). Table 1 shows the results from this analysis. All factors loadings were greater than 0.6, with a minimum value 0.719 ($p < 0.001$), validating, according to Hair, et al., (2016) the individual reliability. Consistency reliability indicators are also validated, since Cronbach alpha and composite reliability values exceeded the minimum value of 0.7 (Hair, et al., 2016).

Convergent validity is confirmed for three fundamental reasons. First, as previously mentioned, all elements have been positively and significantly integrated into their respective factors. Secondly, all the values obtained, in relation to composite reliability (CR) are higher than 0.7. And finally,

Table 1. Composite reliability, average variance extracted, correlations, and discriminant validity checks.

Latent Variables	α	CR	AVE	1	2	3	4	5	6
(1) Place attachment	0.851	0.889	0.692	0.832	0.154	0.174	0.180	0.707	0.136
(2) Local knowledge assimilation	0.831	0.922	0.856	0.136	0.925	0.735	0.665	0.379	0.542
(3) Local knowledge acquisition	0.760	0.845	0.578	0.150	0.607	0.760	0.388	0.478	0.183
(4) Innovation spillover	0.808	0.883	0.717	0.139	0.579	0.343	0.847	0.379	0.412
(5) Community-centered strategy	0.712	0.868	0.766	0.549	0.286	0.362	0.265	0.875	0.483
(6) Innovation capacity	0.915	0.941	0.800	0.122	0.474	0.125	0.376	0.383	0.894

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.

as it is possible to verify in table 1, the average variance extracted (AVE) for all factors, exceeds the minimum limit of 0.50 (Besser & Miller, 2001). Thus, two methods were used to analyze the discriminatory efficacy, first using the Fornell and Larcker criteria, which requires that the result of calculating the square root of the AVE indicator (values that are in bold, in table 1, on the diagonal) is greater than its correlation with the other factors. (Fornell & Larcker, 1981)

This allows us to conclude, that the Fornell and Larcker (1981) criterion is acceptable for all factors. Next, the second method was applied based on the analysis of the heterotraitmonotrait (HTMT) criterion (Hair, et al., 2016). All values of the HTMT indicator (values above the diagonal of Table 1) are below the maximum limit of 0.85 (Hair, et al., 2016), thus providing even more extraordinary evidence of discriminant validity.

To evaluate the structural model, the signal, magnitude and significance of the structural path coefficients were used. The magnitude of the R² value (coefficient of determination) was studied for the endogenous variables: knowledge assimilation, innovation spillover, community-centered strategies and innovation capacity, and was analyzed as an instrument of predictive accuracy of the model, in which results of 36.8%, 33.5%, 38.2% and 29.1% respectively were obtained. All the above results exceed the minimum limit of 10% (Falk & Miller, 1992). In addition, collinearity showed VIF results ranging from 1.00 to 1.089, below the maximum limit of 5 (Hair et al., 2016).

In order to analyze the significance of the coefficients, the Stone-Geisser Q² values were used as a measure of predictive importance of the model (Hair, et al., 2016). The values for all endogenous variables are 36.2%, 32.9%, 37.1% and 27.9% respectively, and all results are above 0, this value, the limit, (Hair, et al., 2016) and show that the model has a predictive relevance.

4.2 Structural Model (Direct Effects)

Table 2 presents the bootstrapping with 5,000 sub-samples parameter estimation, as indicated by Hair, et al. (2016), providing the direct effects between variables. Accordingly, local knowledge acquisition has a positive and significant influence on local knowledge assimilation ($\beta= 0.614$; $p< 0.001$) and also that local knowledge acquisition has a positive influence on community-centered strategy ($\beta= 0.290$; $p< 0.001$), providing support for H1 and H2, respectively.

The results also show that place attachment has a significant positive impact on community-centered strategies ($\beta= 0.503$; $p< 0.001$) as well as, local knowledge assimilation has a positive influence on the spillover effect ($\beta= 0.586$; $p< 0.001$). The above result provides support, thus validating the H7 and H9 respectively.

Finally, the results show that local knowledge assimilation has a positive and significant effect on innovation capacity ($\beta= 0.398$; $p< 0.001$), and that community-centered strategy have a positive

and significant impact on innovation capacity ($\beta= 0.273$; $p < 0.001$), allowing to validate the H3 and H5 respectively.

4.3 Structural Model (Mediating Effect)

The indirect effects of the mediating variables were also studied, the results of which are presented in table 3 below. The results of the study show that the indirect effects of local knowledge acquisition on the innovation spillover effect, with the mediate effect of local knowledge assimilation, are significant,

Table 2. Structural model assessment. (direct effects)

Path	Path coefficient	Standard errors	t-statistics	p-values
Local knowledge acquisition@ Local knowledge assimilation	0.614	0.070	8.722	0.000
Local knowledge acquisition@ Community-centered strategy	0.290	0.080	3.601	0.000
Place attachment@ Community-centered strategy	0.503	0.103	4.930	0.000
Local knowledge assimilation@ Innovation spillover	0.586	0.082	7.065	0.000
Local knowledge assimilation@ Innovation capacity	0.398	0.072	5.487	0.000
Community-centered strategy@ Innovation capacity	0.273	0.066	4.097	0.000

as well as those of local knowledge acquisition on the innovation capacity, through local knowledge assimilation are also obtained ($\beta= 0.360$; $p < 0.001$) and ($\beta= 0.244$; $p < 0.001$), providing support for H4 and H10 respectively. The indirect effects of place attachment on innovation capacity through the influence of community-centered strategies are significant ($\beta= 0.137$; $p < 0.01$), supporting H8. Finally, the indirect effects of local knowledge acquisition on innovation capacity through community-centered strategies are significant ($\beta= 0.079$; $p < 0.01$), thus supporting H6.

5. DISCUSSION

The model consider as outcomes, the innovation spillover effect and the innovation capacity. There is a logical path where the starting point is knowledge acquisition, the first step of knowledge management. Our findings show that a constant state of alert is important, as is the high level of socialization between parties. The importance of socialization within the local community corroborates Czernek

Table 3. Structural model assessment (indirect effects)

Path	Path coefficient	Standard errors	t-statistics	p-values
Local knowledge acquisition@ Local knowledge assimilation@ Innovation spillover	0.360	0.065	5.388	0.000
Local knowledge acquisition@ Local knowledge assimilation@ Innovation capacity	0.244	0.050	4.780	0.000
Place attachment@ Community-centered strategy@ Innovation capacity	0.137	0.043	3.211	0.001
Local knowledge acquisition@ Community-centered strategy@ Innovation capacity	0.079	0.029	2.656	0.008

(2014), where TLEs benefit from interdependence relations, thus creating value in the form of synergy among the community (Hjalager, et al., 2017).

As the results indicate, community-centered strategies play an essential role in innovation, since they are the main source and focus where tacit knowledge is found, and interdependence relations are relevant once again, since it can be through them that the innovation capacity of the entrepreneur can be significantly and positively impacted (Hoarau, 2014). The fact that local knowledge acquisition affects its assimilation was also validated, since it is through the acquisition of new knowledge that it is possible to transform the existing knowledge into innovation, and also by adapting the new acquired knowledge, in order to produce a new concept within the organization, which will lead to an increase in the innovation capacity, however it is not only this process of acquisition, which is relevant, but it is also necessary to shape the new knowledge and create something significant that allows the organization to satisfy the market (Yachin, 2019).

The results also indicate that place attachment positively and significantly affects community-centered strategy, since the community itself is part of the environment that enhances the sense of place attachment, and this environment is surrounded by memories, special objects and interpersonal relationships (Zhang, et al., 2015). Thus, community-centered strategy is considered a basic mechanism for this small-scale tourism industry, which corroborates previous statements already validated by Binkhorst and Den (2009), however, despite all the abovementioned, there is always some difficulty in integrating the new local knowledge already acquired and turning it into innovation (Hoarau, 2014).

As previously studied by Zhang, et al., 2015, the innovation spillover effect, which due to the complexity of its nature, cannot be transferred by explicit sources, is then transferred in an unintentional way and ends up being carried out ‘automatically’ since the knowledge ends up “spreading” to other organizations that offer similar services and products, which corroborates the study by Zhang et al. (2015). Given the interconnection of the new knowledge acquired with the basic knowledge of the TLEs business and the assimilation and integration of the same, the innovation spillover effect can occur through this same process, as this study validates it. As a result, new knowledge is generated for organizations within the same community that offer similar products and services, knowledge that consists of the base knowledge that TLEs already had, and the innovation that it created itself, adding this base knowledge to the new locally acquired knowledge. Thus, the results reveal that the process of knowledge management has a positive and significant impact on the innovation spillover effect, a result extends existing knowledge since this relationship had not previously been validated by researchers.

6. CONCLUSIONS

6.1. Theoretical Contributions

A quantitative approach was used to achieve the research objectives. The objectives are twofold based on the antecedents of innovation spillover and entrepreneurial innovation. Results show that the management of acquired and integrated knowledge is fundamental to innovation capacity and innovation spillover effect. Community-centered strategy plays a crucial role, representing a mediate effect on the relationship between the variables. Although little attention is paid to knowledge management in small-scale businesses, local communities should be seen as a source of knowledge resources, which TLEs can benefit by merely living there, knowing traditions, ideals, people, and above all, the market and its needs.

Nowadays, this tourism practice is quite useful for destinations, due to the fact that there are more and more potential clients, with the need for ‘emotional fulfillment’ as well as feeling that they belong to a specific location (such as TLEs), thus obtaining a special connection, surrounded by memories and knowledge, being beneficial for both TLEs and the communities around the region, given the possibility of development.

In general, lifestyle entrepreneurs face the challenge of innovation, a challenge that requires the use of tools to achieve it. The knowledge assimilation is another challenge faced by these entrepreneurs. It is not enough to acquire the knowledge, but also to know how to see it as an opportunity and integrate it in their business in order to be innovative and to satisfy the needs of their clients. As this knowledge is applied, a spread occurs among small businesses (with similar products and services) within the same community, promoting the innovation spillover effect. This latter relationship, which has been identified in this study, thus represents a contribution to the literature.

6.2. Managerial Implications

Practical implications can also be identified. Our study recognizes the importance of local knowledge on innovation. It would be fundamental for both destination management organizations and TLEs to seek this resource in a more active way, using more informal tools for this purpose, in order to develop a large local social network involving the community.

The community has thus proved to be one of the decisive features in the choice of tourist destinations, since, due to its local residents, it is beneficial to TLEs in two ways, according to Czernek (2014), the residents, besides being a resource rich in knowledge, have unique skills and abilities related to sports, culture, food that are practiced in that place, something that can create the desirable tourist environment for customers.

Apart from the fact that the connection to the site influences TLEs' ability to innovate, it would be useful if customers also felt this type of connection. Place attachment has several components added together in order to exist, the community being one of them as mentioned above. As individuals in general seek to feel a sense of "escape" from their routine, and feel that they belong to that location, which in the future could increase the likelihood of returning to the tourist destination visited, and thus this could become a competitive advantage for the entrepreneur.

6.3. Limitations and Future Research

This study presents some limitations and shows several avenues for future investigations. Due to the inexistence of a database informing the total number of TLEs, a convenience non probabilistic sample was chosen, causing eventual discrepancies in the representativeness of the studied population. Furthermore, the sample included only Portuguese and Spanish TLEs. Future research could replicate the model in different cultural contexts, exploring social life dimensions across continents.

FUNDING AGENCY

The publisher has waived the Open Access Processing fee for this article.

REFERENCES

Al-Haraisa, Y. E., Al-Ma'aitah, N., Al-Tarawneh, K., & Abuzaid, A. (2021). Talent Management Practices and Competitive Advantage: Evidence From the Jordanian Insurance Sector. *International Journal of Service Science, Management, Engineering, and Technology*, 12(5), 102–115. doi:10.4018/IJSSMET.2021090107

- Avdimiotis, S. (2012). Tacit knowledge transfer in tourism organisations, based on the development of fuzzy rules. *International Journal of Tourism Policy*. doi:10.1504/IJTP.2012.049721
- Berghman, L., Matthyssens, P., Streukens, S., & Vandenbempt, K. (2013). *Deliberate Learning Mechanisms for Stimulating Strategic Innovation Capacity*. Academic Press.
- Besser, T., & Miller, N. (2001). Is the good corporation dead? The community social responsibility of small business operators. *Journal of Socio-Economics*, 30(3), 221–241. doi:10.1016/S1053-5357(01)00094-4
- Binkhorst, E., & Den, D. T. (2009). Agenda for co-creation tourism experience research. *Journal of Hospitality Marketing & Management*, 18(2-3). doi:10.1080/19368620802594193
- Booyens, I., & Rogerson, C. M. (2015). Creative Tourism in Cape Town: An Innovation Perspective. *Urban Forum*, 26(4), 405–424. doi:10.1007/s12132-015-9251-y
- 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
- Buckley, R., & Ollenburg, C. (2013). Tacit knowledge transfer: Cross-cultural adventure. *Annals of Tourism Research*, 40, 419–422. doi:10.1016/j.annals.2012.08.010
- Choi, Y. (2021). A Study of the Role of Trust in Sharing Economy in the Tourism Industry. *International Journal of Service Science, Management, Engineering, and Technology*, 12(4), 26–38. doi:10.4018/IJSSMET.2021070102
- Cooper, C. (2015). Managing tourism knowledge. *Tourism Recreation Research*, 40(1), 107–119. doi:10.1080/02508281.2015.1006418
- Czernek, K. (2014). The Role Of Social Embeddedness in Tourist Region Cooperation. *European Journal of Tourism and Hospitality Research*, 5(2), 61–81.
- Daly, P., Dias, A. L., & Patuleia, M. (2021). The Impacts of Tourism on Cultural Identity on Lisbon Historic Neighbourhoods. *Journal of Ethnic and Cultural Studies*, 8(1), 1–25. doi:10.29333/ejecs/516
- Dias, Á., Patuleia, M., Silva, R., Estêvão, J., & Gonzalez-Rodríguez, M. R. (2021c). Post-pandemic recovery strategies: revitalizing lifestyle entrepreneurship. *Journal of Policy Research in Tourism, Leisure and Events*, 1-7. 10.1080/19407963.2021.1892124
- Dias, Á., González-Rodríguez, M. R., & Patuleia, M. (2020). Developing poor communities through creative tourism. *Journal of Tourism and Cultural Change*, 1–21. doi:10.1080/14766825.2020.1775623
- Dias, Á., González-Rodríguez, M. R., & Patuleia, M. (2021a). Retaining tourism lifestyle entrepreneurs for destination competitiveness. *International Journal of Tourism Research*, 23(4), 701–712. doi:10.1002/jtr.2436
- Dias, Á., González-Rodríguez, M. R., & Patuleia, M. (2021b). Creative tourism destination competitiveness: An integrative model and agenda for future research. *Creative Industries Journal*, 1–24. doi:10.1080/17510694.2021.1980672
- Dias, Á., Silva, G. M., Patuleia, M., & González-Rodríguez, M. R. (2020a). Developing sustainable business models: Local knowledge acquisition and tourism lifestyle entrepreneurship. *Journal of Sustainable Tourism*, 1–20. doi:10.1080/09669582.2020.1835931
- Dias, Á., Silva, G. M., Patuleia, M., & González-Rodríguez, M. R. (2020b). Transforming local knowledge into lifestyle entrepreneur's innovativeness: Exploring the linear and quadratic relationships. *Current Issues in Tourism*, 1–17. doi:10.1080/13683500.2020.1865288
- Dias, Á., Silva, R., Patuleia, M., Estêvão, J., & González-Rodríguez, M. R. (2021d). Selecting lifestyle entrepreneurship recovery strategies: A response to the COVID-19 pandemic. *Tourism and Hospitality Research*, 1-7. 10.1177/1467358421990724
- Engeset, A. B., & Heggem, R. (2015). Strategies in Norwegian Farm Tourism: Product Development, Challenges, and Solutions. *Scandinavian Journal of Hospitality and Tourism*, 15(1-2), 122–137. doi:10.1080/15022250.2015.1005332
- Ferreira, J., Ratten, V., & Dana, L. P. (2017). Knowledge spillover-based strategic entrepreneurship. *The International Entrepreneurship and Management Journal*, 13(1), 161–167. doi:10.1007/s11365-016-0415-6

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *JMR, Journal of Marketing Research*, 18(1), 39–50. doi:10.1177/002224378101800104
- García-Villaverde, P. M.-R.-M., Parra-Requena, G., & Molina-Morales, F. X. (2018). Structural social capital and knowledge acquisition: Implications of cluster membership. *Entrepreneurship and Regional Development*, 30(5-6), 530–561. doi:10.1080/08985626.2017.1407366
- Hair, J. F., Hult, G. T., Ringle, C. M., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hallak, R., Brown, G., & Lindsay, N. J. (2012). The Place Identity e Performance relationship among tourism entrepreneurs: A structural equation modelling analysis. *Tourism Management*, 33(1), 143–154. doi:10.1016/j.tourman.2011.02.013
- Hjalager, A. M., Kwiatkowski, G., & Ostervif, M. (2017). Innovation gaps in Scandinavian rural tourism. *Scandinavian Journal of Hospitality and Tourism*, 18(19), 1–17. doi: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. doi:10.1080/15022250.2014.887609
- Jansen, J. J., Van Den Bosch, F. A., & Volberda, H. W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedents matter? *Academy of Management Journal*, 48(6), 999–1015. doi:10.5465/amj.2005.19573106
- Kropp, F., Lindsay, N., & Shoham, A. (2006). Entrepreneurial, market, and learning orientations and international entrepreneurial business venture performance in South African firms. *International Marketing Review*, 23(5), 504–523. doi:10.1108/02651330610703427
- Lai, P.-H., Morrison-Saunders, A., & Grimstad, S. (2017). Operating small tourism firms in rural destinations: A social resenations approach to examining how small tourism firms cope with non-tourism induced changes. *Tourism Management*, 58, 164–174. doi:10.1016/j.tourman.2016.10.017
- Lalli, M. (1992). Urban-related identity: Theory, measurement, and empirical findings. *Journal of Environmental Psychology*, 12(4), 285–303. doi:10.1016/S0272-4944(05)80078-7
- Lang, R., Fink, M., & Kibler, E. (2013). Understanding place-based entrepreneurship in rural Central Europe: A comparative institutional analysis. *International Small Business Journal*, 32(2), 204–227. doi:10.1177/0266242613488614
- Leonard, N., & Insch, G. S. (2005). Tacit Knowledge in Academia: A Proposed Model and Measurement Scale. *The Journal of Psychology*, 139(6), 495–512. Advance online publication. doi:10.3200/JRPL.139.6.495-512 PMID:16419440
- Loureiro, S. C. (2014). The role of the rural tourism experience economy in place attachment and behavioral intentions. *International Journal of Hospitality Management*, 40, 1–9. doi:10.1016/j.ijhm.2014.02.010
- Marasco, A., Martino, M. D., Magnotti, F., & Morvillo, A. (2018). Collaborative innovation in tourism and hospitality: A systematic review of the literature. *International Journal of Contemporary Hospitality Management*, 30(6), 2364–2395. Advance online publication. doi:10.1108/IJCHM-01-2018-0043
- McGee, J. E., Peterson, M., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship Theory and Practice*, 33(4), 965–988. doi:10.1111/j.1540-6520.2009.00304.x
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge Creating Company: How Japanese companies create the dynamics of innovation*. Oxford University Press.
- Panahi, S., Watson, J., & Partridge, H. (2013). Towards tacit knowledge sharing over social web tools. *Journal of Knowledge Management*, 17(3), 379–397. Advance online publication. doi:10.1108/JKM-11-2012-0364
- Pereira, L., Jerónimo, C., Sempiterno, M., Lopes da Costa, R., Dias, Á., & António, N. (2021a). Events and Festivals Contribution for Local Sustainability. *Sustainability*, 13(3), 1520. doi:10.3390/su13031520
- Pereira, V., Silva, G. M., & Dias, Á. (2021b). Sustainability Practices in Hospitality: Case Study of a Luxury Hotel in Arrábida Natural Park. *Sustainability*, 13(6), 3164. doi:10.3390/su13063164

- Prayag, G., & Ryan, C. (2011). *Antecedents of Tourists' Loyalty to Mauritius: The Role and Influence of Destination Image, Place Attachment, Personal Involvement, and Satisfaction*. 10.1177/0047287511410321
- Richter, N. F., Cepeda, G., Roldán, J. L., & Ringle, C. M. (2015). *European management research using Partial Least Squares Structural - Equation Modeling (PLS-SEM)*. *European Management*. doi:10.1016/j.emj.2014.12.001
- Sawhney, A., & Ahuja, V. (2021). Drivers of Social Media Content Marketing in the Banking Sector: A Literature Review. *International Journal of Service Science, Management, Engineering, and Technology*, 12(3), 54–72. doi:10.4018/IJSSMET.2021050104
- Shrivastava, P., & Kennelly, J. J. (2013). Sustainability and place-based enterprise. *Organization & Environment*, 26(1), 83–101. doi:10.1177/1086026612475068
- Srivastava, S. (2021). Exploring Enablers of Value Co-Creation in the Healthcare Service Delivery: An Internal Customer Perspective. *International Journal of Service Science, Management, Engineering, and Technology*, 12(1), 111–126. doi:10.4018/IJSSMET.2021010107
- Trad, A. (2021). The Business Transformation Framework and Enterprise Architecture Framework for Managers in Business Innovation: An Applied Holistic Mathematical Model. *International Journal of Service Science, Management, Engineering, and Technology*, 12(1), 142–181. doi:10.4018/IJSSMET.20210101.0a1
- Wang, S., Hung, K., & Huang, W.-J. (2019). Motivations for entrepreneurship in the tourism and hospitality sector: A social cognitive theory perspective. *International Journal of Hospitality Management*, 78, 78–88. doi:10.1016/j.ijhm.2018.11.018
- Windasari, N. A., & Lin, F. R. (2021). Explicating Open Innovation Using Service-Dominant Logic: Strategic Implications. *International Journal of Service Science, Management, Engineering, and Technology*, 12(2), 78–98. doi:10.4018/IJSSMET.2021030105
- Yachin, J. M. (2019). The entrepreneur–opportunity nexus: Discovering the forces that promote product innovations in rural micro-tourism firmsScandinavian. *Journal of Hospitality and Tourism*, 19(1), 47–65. doi:10.1080/15022250.2017.1383936
- Zhang, C., Xiao, H., & Rao, Y. (2015). Journal of Sustainable Tourism: Tacit knowledge spillover and sustainability in destination development. *Journal of Sustainable Tourism*, 23(7), 1029–1048. doi:10.1080/09669582.2015.1032299

Leandro Ferreira Pereira is CEO and founder of WINNING Scientific Management. He has more than 18 years of experience in senior management positions in management consulting companies and university academic activity. With a degree in Management Informatics from the University of Minho and a PhD in Project Management from the Pontifical University of Salamanca, Leandro Pereira has in his curriculum several of professional and academic distinctions, among which, the best national manager award (from Best Team Leaders), the University Senate Award for having been the best student of the University and the National Prize "Youth and National Defense awarded by the Ministry of Defense". Currently, he divides his professional activity between management consulting, the academy, and advisory various entities, in particular, the Court of Auditors, and has supervisor of dozens of doctoral and master students.

Renato Lopes da Costa is an entrepreneur and is currently CEO of the BCI® - Business Case Institute. Renato Lopes da Costa is however recognized for his work in academic terms, having published more than a hundred scientific articles in the main international business management journals index by Scopus and WoS and 7 books in the same scientific area. Throughout his career for several years he developed his business activity in the areas of retail and banking, developing projects of an operational nature in the areas of banking and management control in the retail area. Renato Lopes da Costa completed his doctorate in the area of business strategy at ISCTE - University of Lisbon, where he developed a pioneering work on the practices and praxis used by management consultants in the development of their work in client companies, contributing to the state of the art in scientific area of business strategy in the field of strategy-as-practice research. As a university professor, he supervised almost one hundred of masters and doctorates in the area of business management, being recognized for this valence, as well as for his teaching ability in the area of business strategy in undergraduate, master's, executive master's and doctorate degrees, nationally and internationally. Having conducted several courses at Portugal universities, he is currently director of the MscBA - Master in Business Administration at ISCTE (being listed on the prestigious lists of the Financial Times as one of the best European courses in the scientific area of management) and Diretor of the Global Master Series INDEG in Business Management, Marketing e Finance e Risk Management. Since 2021, Renato Lopes da Costa belongs to the scientific council of ISCTE as a member of the plenary.