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International Journal of Tourism Policy

ISSN online: 1750-4104 - ISSN print: 1750-4090
https://www.inderscience.com/ijtp

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DOI: 10.1504/IJTP.2023.10061973

Article History:

Received:	14 June 2023
Last revised:	06 September 2023
Accepted:	09 September 2023
Published online:	05 July 2024

Identifying tourism cluster characteristics on the central Namibian coast: policy implications

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Abstract: A rise in adventure travel in the early 1990s has boosted the growth of tourism in Namibia's coastal town, Swakopmund. This has led to the concentration of tourism SMEs. This research aims to investigate whether this concentration of SMEs has the qualities of a tourism cluster, delineate inter-industry linkages and measure interdependencies to identify levels of collaborative and competitive behaviours. Using an exploratory mixed-method design joining agglomeration literature, personal interviews, a business count, and a questionnaire survey, the local tourism industry in Swakopmund was confirmed to exhibit tourism cluster characteristics. The results exposed strong interdependencies of cooperative behaviour and coopetition between tourism and tourism-dependent firms, despite motivational responses uncovering destructive business methods of aggressive commission actions and intellectual property theft. This research underscores the significance of understanding a tourism cluster's structure and history in conjunction with uncovering industry strengths and weaknesses to establish policies in support of SME growth.

Keywords: tourism clusters; agglomerated industries; Swakopmund; adventure tourism; SMEs; location quotient; mixed method.

Reference to this paper should be made as follows: Sarro, J., Saayman, A. and Claassen, C. (2024) 'Identifying tourism cluster characteristics on the central Namibian coast: policy implications', *Int. J. Tourism Policy*, Vol. 14, No. 4, pp.421–437.

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1 Introduction

Tourism to Namibia has been growing steadily since independence in 1990 (The Policy Planning and Information Unit, 1997; ME(F)T, 2021). After independence, new Namibian tourism firms emerged, as increased national stability in both South Africa and Namibia contributed to heightened interest in both nations as tourism destinations (McKay, 2016). This coincided with a growth in sub-Saharan overland travel interests and rising global interest in adventure travel (Buckley, 2007).

An estimated 50% of overseas travellers to Namibia visit the coastal town of Swakopmund. This translates to approximately 275,000 foreign visitors per year, plus an additional 100,000 domestic visitors (DECOSA, 2015), making Swakopmund a top destination in Namibia. As visitation to the coastal town increased, a new activity-based tourism industry began and the town became home to a large number of small and medium-sized tourism firms, servicing all aspects of the tourism value chain. According to Rosenfeld (1997, p.8) such "a geographically bounded concentration of interdependent businesses that collectively share common opportunities and threats" can be referred to as a cluster. Porter (1998, p.78) defines clusters as "geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition." The overriding components of clusters are spatial proximity and interdependent relationships. Specifically, such interdependent relationships exhibit labour pooling and the sharing of knowledge for the benefit of the entire industry, which is maintained by healthy degrees of coopetition and shared common goals (Bergman and Feser, 1999). Understanding

these multiple clustering traits that exist amongst industry players contribute towards a formal acknowledgement of the benefits to the local economy.

As Namibia as a whole strives to recover pre-pandemic tourism levels, tourism clusters in coastal towns such as Swakopmund, can play an important part in the recovery. During January 2023, the Erongo Regional Tourism Forum met in Swakopmund with stakeholders. The forum's chairperson, Neville Andre, pointed to the challenges and opportunities which remain (Kaure, 2023):

> "We can all testify from observations in occupancy at local accommodation establishments that the Erongo Region and its towns such as Swakopmund, Walvis Bay and Henties Bay has attracted a large number of local, regional and international visitors in 2022. This can be attributed to the closer collaboration amongst the key stakeholders in the industry…. The sector's real value has undoubtedly not recovered to pre-pandemic levels yet, but it is showing positive growth. Hence, there is a dire need to continue to improve its performance."

Speaking to this need, this paper aims to identify and measure clustering characteristics exhibited by tourism firms in Swakopmund, founded in Porter's (1990, 1998) assertions that interfirm cooperation and competition (coopetition) improves firm performance in conjunction with increasing the destination's global competitiveness. Obtaining an understanding into the innerworkings of inter-firm clustering levels in pre-pandemic business environment provides policymakers and industry players

a a window to see where linkages can be improved

b guidelines and goals for reviving the linkages.

At present, a key problem is that there is a deficiency in data on the nature and levels of clustering characteristics alongside an absence of tourism revival policies. The significance of investigating a tourism cluster originates from the recognitions that clusters are progressively understood as a vital component of contemporary balanced economies, requiring distinctive policies aimed at creating, maintaining and upgrading existing clusters (Porter, 1998). Policymakers can benefit from identifying tourism cluster characteristics in Swakopmund and rethinking traditional methods of economic policies and revival strategies.

In order to analyse this problem, three objectives are drawn together. First, to analyse literature on tourism cluster theories, focussing on the effects of agglomeration from a Porterian competitive standpoint by measuring firm interdependencies and cooperative practices. Secondly, to determine the extent of clustering in tourism firms in Swakopmund using a mixture of quantitative and qualitative methods to extract results from local tourism industry owners and managers. Lastly, to draw conclusions about the effects of and make policy recommendations pertaining to tourism cluster and surrounding industries.

2 Tourism clusters

Although initial agglomeration studies focused primarily on the manufacturing sector, industrial cluster theories are applicable and adaptable to the service industry (Kachniewska, 2013). There are similarities between the cluster theories of the tourism industry and industrial districts (Yalçınkaya and Güzel, 2019) and although the concept

of a tourism cluster is often perceived to be underdeveloped, there is much potential for future linkage between industrial cluster theory and the tourism industry (Kachniewska, 2013) as firms operating in tourism sectors act in accordance with multiple industrial cluster properties (Cunha and Cunha, 2005). For example, geographical proximity and industry agglomeration is a common occurrence in the tourism industry, as operators tend to collocate near particular attractions such as ski resorts, beaches, or historical monuments. Bounded by their respective attractions, tourism operators often share infrastructures, collectively manage their resources or attractions, and innovate to increase competitive advantages (Dwyer and Kim, 2003). Their firm structure often consists of multiple SMEs contributing to the end product or travel experience (Hjalager, 1999). As Porter (1998, p.81) suggests, "In a typical tourism cluster, for example, the quality of a visitor's experience depends not only on the appeal of the primary attraction but also on the quality and efficiency of complementary businesses such as hotels, restaurants, shopping outlets and transportation facilities". At the core of the service-side of a positive tourism experience lies collaborative and cooperative business relationships with a common aim to enhance the destination's experience (Capone, 2004).

Research into the agglomeration of tourism firms makes use of methods of identification and analysis derived from conventional geographic, quantitative and qualitative methods employed in both industrial and tourism cluster studies (Bergman and Feser, 1999). Focus on implementing industrial cluster theories into tourism development has steadily increased over the past two decades (Capone, 2016) with applicability into tourism ranging from macro-assessments of intra-regional tourism labour productivity (Kim, 2019) to comparisons of specific tourism regions (Flowers and Easterling, 2006). Data of this nature, especially in developing nations, is often scarce or non-existent, requiring a hands-on research approach where individual firms are queried (Feser and Luger, 2003). In the case where measuring the effects of inter-industry collaborative and cooperative behaviour in tourism is concerned, the practice commonly encounters challenges resulting from measuring untouchable latent variables representing cluster characteristics. Moreover, assessing the contribution of cooperative and collaborative behaviour in conjunction with the positive effects of competition become tricky in situations where qualitative aggregate data is unavailable to offer comparisons (Bergman and Feser, 1999).

That does not mean that tourism clusters have not been investigated in developing nations. For example, the consultancy research of the Cluster Consortium undertook a series of studies and implemented tourism cluster strategies in South Africa[1] (Nordin, 2003). Craftwork clusters in Kenya were investigated by McCormick (1998) who identified advantages of wood craft sales collocating near craft producers which attracted tourists interested in the manufacturing processes, while tourism clusters were identified in the Zambian tourism regions by Liu and Mwanza (2014).

In the case of investigating tourism clusters, Capone (2004) suggests the three conditions that have to be tested:

1 Verify the existence of a consistent number of businesses that enhance the assets (cultural, natural or historical) of the tourist destination.

2 Verify the set of enterprises that constitute the cluster of localised SMEs at the tourist destination.

3 Substantiate relationships between the tourist location community and the businesses in the cluster.

Martin and Sunley (2011) raise concerns over the ambiguous nature of measuring intangible clustering characteristics from unclear and vague definitions of what constitutes clusters. To conclude, various authors such as Capone (2016), Chhetri et al. (2013), Kim (2019), and Flowers and Easterling (2006) have incorporated industrial cluster theories into tourism areas. Additionally, in sub-Saharan Africa, the use of cluster-based policies was implemented in South Africa, but beyond South Africa there has been very scarce considerations of cluster research in tourism.

3 The Namibian tourism industry

Namibia's 5th National Development Plan (Republic of Namibia, 2018) incorporates tourism as a key role player in SME growth, stating that only tourism and transport exceeded the growth projections laid out in the 4th national development plan. According to Turpie et al. (2005) tourism growth in Namibia averaged 16% per year preceding the September 11 attacks in the USA. The Namibian government chose an open-door policy towards the tourism industry with regards to foreign operators. Permitting non-Namibian guides and drivers to conduct tours within Namibia via work permits is an example of this. The result of policy collaboration, global travel growth trends and substantial comparative advantages are shown in increasing visitor numbers from 1994 until 2020 (ME(F)T, 2021).

Figure 1 The Erongo region (see online version for colours)

Source: Brundige et al. (2011)

The Namibian tourism industry consists mainly of SMEs, based in the capital city, Windhoek, or on the central coast in the Erongo Region (see Figure 1). The capital city of Windhoek benefitted from tourism SME growth as a result of proximity to the busiest airport, and ample opportunities for shopping of supplies and services. Instead, tourism in the Erongo Region is more focussed on coastal and adventure activities, with an analysis of SMEs in Swakopmund outlining both competitive and comparative advantages (DECOSA, 2015).

From the above it is evident that there exist following gaps: First, there is yet to be a study recognising the existence of tourism clusters in Namibia. Second, measuring levels of cooperative and collaborative interfirm behaviour can identify areas where improvements can yield positive results. Lastly, tourism policymakers in Namibia have not taken into consideration the benefits that adapting policies to foster tourism cluster growth bring to local economies. If tourism clustering traits can be measured, more progressive policies can be enacted to align with broader national goals of maintaining globally competitive tourism industries.

4 Research design

The research process consisted of three phases, namely a literature review, business count, and data collection by questionnaire (Creswell, 2009) as outlined and described below.

4.1 Phase 1: literature review

The literature review (LR) aimed identify core clustering characteristics that could be used to characterise clusters in the local tourism industry and to develop the methods for collecting data. Industrial and tourism cluster publications ascertain how clusters and analytical approaches differentiate depending on several factors, a few of which being: the size of a specific region or industrial density (Briassoulis, 1991); a cluster's age (Menzel and Fornahl, 2007); supplementary industries involved in a cluster (Bergman and Feser, 1999); which industry is acting as a cluster (Rocha, 2004) and; to what degree do extrinsic forces (i.e., firms and industries outside of the cluster) play in the social make-up and networks aligned within the cluster under investigation (Hollick and Braun, 2005).

4.2 Phase 2: business count and network

The second phase conducted a physical business count to compile a database of tourism and tourism-dependent firms in Swakopmund, with the aim to uncover inter-industry linkages and delineate tourism suppliers.

4.3 Phase 3: multi-purpose questionnaire

Tourism cluster investigations generally require insight beyond spatial agglomeration measures of geographic location focusing on inter-firm relationships, labour pooling,

knowledge spill overs and innovative activities (Erkuş-Öztürk, 2009). Qualitative methods were employed to support or supersede the limitations of empirical results (Yodsuwan and Butcher, 2012) and build up an understanding of tourism SME network operations (Komppula, 2014). To encapsulate the investigation of geographic proximity, labour pooling and interdependencies, a single multi-purpose questionnaire was constructed (Marais et al., 2017) and interviewer administered. The questions were based on the research of vom Hofe and Chen (2006), and Erkuş-Öztürk (2009).

The questionnaire used 5-point balanced Likert scale questions, as proposed by Cunha and Cunha (2005), and was designed containing equidistant scale variations to simplify statistical processing and to maintain a steady and coherent structure for respondents. In conjunction with Likert scale ratings, open-ended questions were incorporated to provide more insight and a concluding commentary section allowed respondents to provide further perceptions and observations vis-à-vis the local tourism industry in Swakopmund. A stratified and convenience sampling method was employed. To ensure additional sample-size guidelines, the sample size of 150 was cross-referenced to online sample-size calculators (quadradics.com) revealing that, with a 95% confidence level and a population size of 385, a sample of 150 represent a margin of error of 6%.

The Likert scale responses are subjected to an exploratory factor analysis (EFA) to ascertain the assorted constituents of the factors. Preliminary tests such as the Kaiser-Meyer-Olkin test and the Bartlett's test of sphericity were used to establish validity of performing the EFA. To further understand the relationships between different business sectors and the principal component variables, an ANOVA was conducted. ANOVA results confirm significant relationships without clarifying which particular sectors display strong relationships. The Bonferroni and Tamhane tests were used to identify the significant differences.

5 Results and discussion

5.1 Phase 1 results

Principal clustering characteristics disinterred from the Phase 1 literature included 182 works on industrial and tourism clusters. A total of 193 works in the field of cluster measuring methods were used for research design. Tourism distribution (9), tourism works on booking referencing (15) and related works on activity tourism (30) that were incorporated are listed in the order of each characteristic's consistency within the reviewed literature : *Geographic proximity* – firms in the same industry located near each other; *Increased labour pooling; Interdependencies* – firms dependent on each other to achieve benefits; *Coopetition* – increasing the competitiveness of the local industry; *Collaboration* – firms working together to reach common goals; *Trust* – business relations built on long-term trust; and *Community culture* – connectedness founded in historical or cultural ties. The seven listed clustering characteristics were established as key variables to be investigated in the following empirical research stages and is presented in Table 1.

Table 1 Review of cluster characteristics contributing to tourism growth in Swakopmund

Cluster characteristics	*Arguments for cluster characteristics impacting economy*
Geographic proximity	The town has always been spatially agglomerated, only 7 × 5 km; nearest town is 23 km
Labour pooling	Namibia is endowed with outdoor people; farming skills; mining and fishing skills transfer
Interdependencies	Geographic isolation drives interdependencies; town members survived 3 regime changes and 3 wars
Coopetition	Interviews confirmed coopetition beginning in the 1990s
Collaboration	DRC Association; Dune Belt Association in 2006; Strong presence of the Hotel Association of Namibia
Knowledge sharing innovation	Word-of-mouth marketing in the 1990s; Mining skills transferred into tourism; Scientific society hosts seminars
Increased entrepreneurial activity	Entrepreneurial activity has existed since the beginning; rapid tourism SME growth in the late 1990s
Trust	Evidence of early relationships built on trust; Activity sector built trust-based relationships in 1990s
Community culture	Strong German community; multicultural township mixed with European decedents

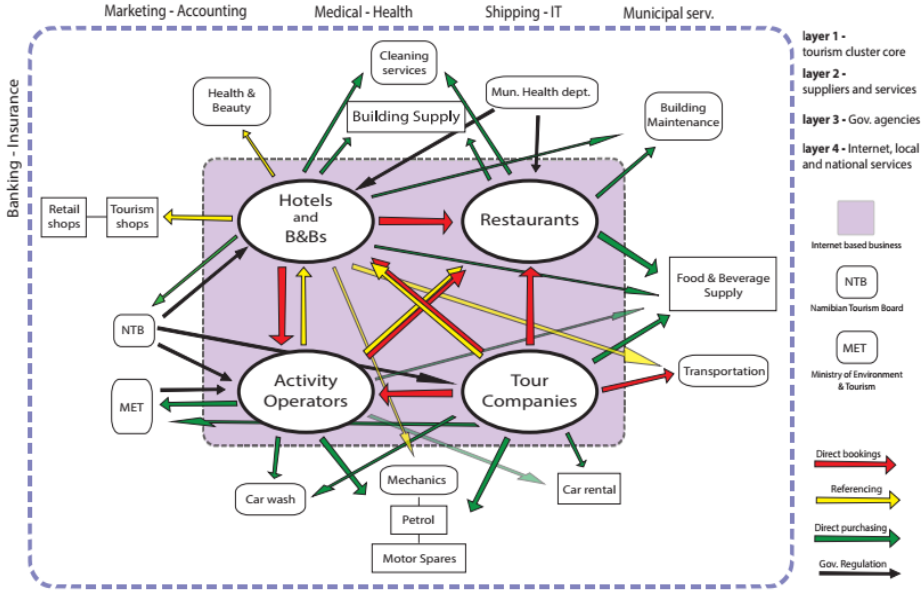
Source: Authors' own compilation

5.2 Phase 2 results

The second phase of this study was a meso-level business survey aimed at obtaining a directory of tourism-related firms in Swakopmund, spatially analysing tourism firm concentrations to uncover clustering characteristics in local tourism. The business survey began in February 2018 and persisted through November of that year. In total, 896 tourism-related businesses were counted in an estimated total of 3600 registered businesses with the Swakopmund Municipality. Tourism-related businesses were categorised into three divisions: Tourism, accounting for 569 (63%) businesses; suppliers, accounting for 142 (16%) of all businesses; and 185 services (21%) registered businesses.

Informal interviews exposed the presence of revenue from tourism or tourism firms, with the exception of the mining sector. Businesses in the service sector showed that, overall 86% received tourism revenue (TR) and, after detaching the outlying mining sector, TR increased to 97% in general services and to 91% in mechanical services. Correspondingly, the supply sectors showed 68% of businesses received TR, and if the domestic supply-orientated businesses, such as home products or building supplies, were not considered, TR rises to 86%. The degree of tourism revenue movement supporting the existence of interdependencies which characterises tourism clusters. Figure 2 illustrates the web of economic and social transactions along with their intensities. Social transactions were revealed to be references or referrals, inspections, consultations, bookings and occasional collaborative efforts.

Figure 2 Swakopmund tourism cluster transaction diagram (see online version for colours)



Source: Author's own compilation

Figure 2 reveals potential interdependencies found in horizontal and vertical clustering between local actors via social and economic transactions (Hollick and Braun, 2005). The model core displays horizontal clustering traits in the form of referencing between four core tourism sub-categories of accommodation establishments, restaurants, activity operators and tour companies.

The deficiency of incoming bookings and referencing to tour companies emphasises a source market consisting exclusively of external or overseas bookings. Conversely, tour companies mentioned significant booking and referencing support to local accommodation establishments, activity operators and restaurants. Hotels were similarly providing bookings and referrals to local activities and restaurants without reciprocal actions.

Potential vertical clustering characteristics between business sectors outside of tourism in Swakopmund reveals a myriad of one-directional purchasing, originating from core tourism firms and extending into the local business community. Activity and tour operators exposed strong dependencies on mechanical services – especially in emergency situations – and supplies for vehicle maintenance. Tourism shops, craft sales and the health and beauty sectors rely greatly on hotel references. In line with Dwyer and Kim (2003), adequate supplies of a wide variety of food and beverages is essential for tour operators and restaurants to remain globally competitive. Concerning estate agencies, out of a sample size of 126 self-catered units, 93% were managed by local estate agencies.

The results displayed in Table 2 show numbers of locally owned tourism businesses compared to external ownership. From Table 2 we see that 70% of tourism businesses are locally owned and managed. The outliers in this table are tour operators at 46% local ownership, and tourism clothing shops at 50% local ownership. The substantial quantity

of non-local tour operators is due to overseas, South African and Windhoek based companies running satellite offices in Swakopmund, which is a reflection on how Namibia has exercised an open-door policy to foreign tourism operators so long as they adhere to regulatory protocols.

Table 2 Percentages of locally owned tourism businesses

Business classification	*Sample size*	*Locally owned*	*Non-local*	*% local*
Activity operators	82	66	15	76%
Tour operators	98	45	53	46%
Restaurants	80	61	19	76%
Accommodation	108	83	25	77%
Acc. self-catering	126	n/a	n/a	n/a
Craft shops	49	41	8	84%
Tourism clothing	12	6	6	50%
Car rental	14	9	5	64%
Total	**569**	**311**	**131**	**70%**

Source: Author's own compilation

Of the 569 tourism businesses counted in 2018, 412 remained by 2022 after the pandemic. Of these, 374 remained unchanged (excluding employment figures), 38 changed ownership, 120 closed and 46 were observed to be dormant. The highest closure rates were amongst the activity (46%) and tour operators (42%).

5.3 Results phase 3

A questionnaire survey was carried out in phase 3. While the focus of the analysis is on cluster characteristics, it is worth noting here that questionnaire motivational responses uncovered a high degree of dissatisfaction with the ability of the current national organisations (excluding HAN) to implement marketing plans and collect and report data. Concerns regarding misguided regulatory efforts were also raised. This underlines the fact that tourism policy in Namibia is at present perceived as being driven by ad hoc policymaking while disregarding private sector initiatives. Given the agglomeration evidence which emerged from Phase 2, the presence of clusters in the tourism industry can be built upon for more efficient policymaking. Although collaboration between multiple stakeholders does not guarantee immediate results, in the long run it is a sensible pathway to a better tourism system in Namibia.

Most of the businesses surveyed (50.0%) were located in the CBD or centre of Swakopmund. The surveyed population was 90 business owners (59.2%) and 62 managers (40.8%) with an average of 10.9 years working for respective firms ($N = 150$, SD = 7.93). Respondent's average experience in the tourism industry is 18.1 years ($n = 150$; SD = 9.21). The mean year businesses started was 2002 ($N = 148$; SD = 15.49) with current business owners who initially started the businesses totalling 112 (74.7%).

Table 3 Results of the principal component analysis

	Collaboration	*Cooperative behaviour*	*Geography*	*Labour*	*Trust*	*Coopetition*
A municipal tourism organisation to increase competitive advantages	**0.538**					
Tourism firms meeting to solve problems and promote new ideas	**0.823**					
Consult outside experts regarding marketing and innovation	**0.852**					
Increased collaboration efforts between tourism organisations	**0.705**					
National tourism organisation to better represent the industry	**0.337**					
Levels of communication and information sharing in the local tourism industry		**0.783**				
Level of conflict resolution		**0.816**				
Tourism firms' flexibility to adapt to change		**0.590**				
Do you prefer to shop within your town zone			**0.811**			
Preference to a supplier being a long-time resident of Swakopmund			**0.773**			
Is it easy to find level 2 employees in Swakopmund				**0.883**		
Is it easy to find level 3 employees in Swakopmund				**0.789**		
Trust with buyers is strong					**0.873**	
Establishing business relationships built on trust					**0.642**	
Impact of competing firms on your product quality						**0.810**
Impact of local tourism industry on the success of business						**0.734**
Factor mean score	***4.1161***	***2.9236***	***2.5135***	***2.8586***	***3.6467***	***3.6453***
Cronbach's alpha	0.777	0.614				

Source: Author's own work

The Likert scale responses were subjected to an exploratory factor analysis (EFA) to ascertain the assorted constituents of the factors. The Kaiser-Meyer-Olkin test scored 0.662, which is above the 0.5 cut-off and the Bartlett's test of sphericity is significant at $p < 0.001$ ($\chi^2 = 355.389$), verifying that there are relationships between the variables and that they are eligible for a factor analysis. Methods employed to extract the factors were principal components with Promax rotations for increased proficiency in discriminating between factors. The outcome number of factors was founded on Kaiser's criterion, where 6 factors with eigenvalues greater than 1 were extracted. The factors explain 65.44% of the variance. Factor labelling was based on the literature and, where more than 2 item in the factor, the Cronbach alpha was used as a reliability indicator.

The factor loadings are indicated in Table 3 and the factors measure the extent of Collaboration, Cooperative behaviour, Geography, Labour, Trust and Coopetition. Collaboration items display the highest mean score (4.1161 out of 5) representing 19.765% of the total variance, indicating a high level of belief in the benefits of collaboration, effectiveness of efficiently run collaborative organisations and the need to increase collaboration between tourism firms. Farsari (2018) reported similar results, indicating that a high degree of tourism actors connected collaboration directly to increasing sales.

The second principal factor is trust, with a mean score of 3.6467 representing 14.2% of total variance indicating strong business relationships built on trust are prevalent in the local tourism network. A high degree of trust with suppliers (0.873) contributing to 10.2% of variance supports Porter (1998) and Nordin (2003) with regards to trust being an intangible component of clusters. The third ranking was coopetition (3.6453, 7.8% of variance) indicating high regards from business operators towards the benefits of competition and positive impacts of the tourism industry as a whole has contributed towards their respective business success.

Cooperative behaviour (2.9236, 7.2% of variance) ranked fourth with the level of conflict resolution in the local tourism industry ranking high (0.816), levels of communication and information sharing (0.783) and flexibility to adapt to change (0.590). Labour pooling (2.8586, 7.2%) indicates a sufficiently skilled tourism labour pool. The last component was geography (2.5135, explaining 6.3% of variance), indicating that geography plays a less significant role for tourism businesses in Swakopmund. Both collaboration and cooperative behaviour had more than two components allowing the use of Cronbach's alpha to determine consistency. Both collaboration (0.777) and cooperative behaviour (0.614) are above the 0.6 threshold, indicating acceptable consistency in the factors.

An ANOVA was used to understand the differences of the factors between three business sectors, namely (1) tourism firms, (2) tourism-dependent businesses, and (2) suppliers to tourism businesses. The results of ANOVA testing are presented in Table 4.

Results revealed that there was a statistically significant differences between different sectors in cooperative behaviour ($F = 3.696$, $p = 0.028$) and Coopetition ($F = 2.45$, $p = 0.092$). Cooperative behaviour differs significant between pure tourism and tourism-dependent businesses. Both the Bonferroni ($p = 0.047$) and Tamhane ($p = 0.037$) test significance at a 5% level of significance. Pure tourism businesses rate Coopetition (mean-3.786) significantly more important than tourism-dependent businesses (mean = 2.856).

Coopetition only showed moderately significant differences between the two types of businesses, with the Bonferroni test ($p = 0.110$) just above the 0.10 acceptance level.

Tourism-dependent businesses view cooperative behaviour (mean = 3.015) as more important than pure tourism businesses (mean = 2.856).

Table 4 ANOVA results

		Sum of squares	*df*	*Mean square*	*F*	*Sig*
Collaboration	Between groups	0.403	2	0.202	0.195	0.823
	Within groups	100.222	97	1.033		
	Total	100.625	99			
Cooperative behaviour	Between groups	7.267	2	3.634	3.696	**0.028**
	Within groups	95.363	97	0.983		
	Total	102.63	99			
Geography	Between groups	1.912	2	0.956	0.936	0.396
	Within groups	99.067	97	1.021		
	Total	100.979	99			
Labour	Between groups	1.454	2	0.727	0.727	0.486
	Within groups	96.969	97	1		
	Total	98.422	99			
Trust	Between groups	1.578	2	0.789	0.782	0.46
	Within groups	97.861	97	1.009		
	Total	99.439	99			
Coopetition	Between groups	4.498	2	2.249	2.45	**0.092**
	Within groups	89.054	97	0.918		
	Total	93.552	99			

Source: Author's own work

6 Discussion

Empirical results presented in this study demonstrate the following. First, the history of tourism in Swakopmund suggest the existence of cluster characteristics since the mid-1990s. In fact, a tourism cluster may have existed decades before without any detectable policies recognising clusters. Secondly, this study uncovered strong bonds between local tourism actors building alongside a global growth in adventure tourism. The local tourism industry experienced increased rates of start-ups and innovation to accommodate for changing markets. Interviews with key players revealed a strong sense of cooperative behaviour, business relationships established on trust, healthy coopetition, and mostly located within close proximity of the town centre. Conversations with key players also revealed a low level of policy interference and a willingness from the Namibian government to issue work visas to prospective tourism entrepreneurs who provided additional innovative plans.

Third, questionnaire results confirmed clustering characteristics. The results revealed considerable belief in collaborative behaviour and ethics supporting local businesses. The factor analysis ranked collaboration with strong significance followed by cooperative behaviour. More specifically, when the local industry was portioned into *Pure Tourism,*

Tourism Dependant and *Suppliers* – pure tourism businesses rated coopetition as being more significant than suppliers and tourism-dependent businesses. Overall, a significant level of cooperative behaviour was observed. This includes local labour where significant levels of loyalty exist in the competence and adequate supply of skilled tourism labour. Furthermore, the local tourism industry is viewed as creating opportunities, being globally competitive, supporting local businesses and overall benefiting the local economy.

The implication for policymaking is firstly to steer government-driven motives towards collaborative initiatives such as destination marketing organisations and attracting innovative entrepreneurs, while avoiding prohibitive regulations that deter cluster-enhancing talent. Currently, policy has been heading towards equality, whether gender-based or ethnical, and sustainability. Although these are vital goals that are cemented in the Namibian constitution, creating and fostering cluster growth in the tourism industry requires a degree of freedom for innovation, collaboration and coopetition, and time to attract and educate a skilled tourism labour pool. As Porter (1998) ascertains, governments should refrain from targeting and intervening in 'desirable' industries via subsidies and restrictions on foreign investments in favouring local businesses.

7 Conclusion

The tourism industry on the coast of Namibia has undergone significant growth during the past 25 years, with policy planning largely performed on an ad hoc basis in reaction to commercial issues with limited budgets. Very little, if any, consideration has been apportioned to the benefits received by the local and national economies through the existence of firms' agglomeration in spatial proximity. Although inter-industry linkages have been acknowledged, there has never been an attempt to employ cluster analysis to the local industries.

This research revealed significant clustering characteristics in businesses in Swakopmund, contributing to future research on tourism clusters in developing regions. The results revealed that clustering attributes played an important role in the success of the local tourism industry. In addition, substantial linkages exist between various levels of businesses within Swakopmund, and these tend to be stronger for businesses in close geographical proximity. Furthermore, strong clustering traits of collaboration, trust, and cooperative behaviour exist. In the process of recovering from the global pandemic, placing more emphasis on educating local tourism stakeholders and policymakers about the benefits to the local economy from firms collaborating and operating in a competitive but cooperative environment will accelerate reconstruction efforts.

From a theoretical perspective, no studies were identified that assessed the agglomeration effects or tourism clusters in Namibia, and this is the first paper to apply industrial cluster concepts to the tourism industry on the coast of Namibia. This paper is therefore targeted towards addressing the gap in agglomeration and tourism cluster research in developing regions using a mixed methods design to capture the effects of tourism clusters. This approach proved to be successful in a country with limited data available and can be replicated in future tourism clusters research.

Tourism organisations (both national and local) can benefit from the results of this paper. Tourism operators view collaboration positively, and this can serve to increase

collaborative efforts between other organisations and government. Operators equipped with an understanding of the benefits of inter-industry collaboration, coopetition and knowledge sharing can increase participation in local associations. Increased participation in local associations provide authorities in higher tourism channels with a better grasp of local tourism industries and the range of specialised products. For example, equipped with a more comprehensive insight into the advantages of Namibia's tourism clusters, the NTB can streamline a national overseas marketing campaign aimed at promoting the country, highlighting tourism hotspots and clusters, as a destination in multiple target markets. Furthermore, to achieve this goal, tourism organisations can increase collaborative efforts to collect and process data relevant to destination marketing alongside addressing the challenges of building infrastructure and training needs.

This research has taken a step forward in documenting the inner workings of a tourism cluster and pinpointing the cluster characteristics of a local economy that can be improved to increase the effectiveness of the cluster. In this process, one paradigm arising from an extended interview with a tourism industry expert comes to mind – collaboration is a learned skill. The industry is highly innovative and constantly evolving to keep up with the desires of travellers. This, when combined with the concepts of industrial clusters, presents a field of interest with seemingly endless horizons to explore.

Limitations to this paper are circumstantial obstacles, data limitations and methodological judgements made by the researcher that can be improved in future research. A primary impediment was the shortage of usable national and municipal data. From the municipal perspective, a pre-existing business count would have saved time that could have resulted in including the entire population (e.g., the informal sector) into this paper, which could have resulted in a broader view of linkages with, for example, more firms from the township, Mondesa. Additionally, due to the large number of variables considered, this paper disregarded the stage of clustering (ageing or new) as a factor of the results. In future studies, this is one aspect of determining the strength of a cluster that should be included in the analysis. The paucity of tourism cluster studies in sub-Saharan Africa imposed challenges to this research, with limited comparable data to confirm or contradict the results of this research.

Finally, the 2020–2021 global pandemic caused global economic shocks in the tourism industry that significantly impeded this paper. Five-month lockdown situations in Swakopmund and the local tourism industry inhibited personal contact and prevented onsite measurements. A severe Covid-19 outbreak in Swakopmund from June 2021 until the end of August 2021 significantly slowed down the interview process due to the ethics of arranging personal interviews. Although it is incorrect to assume this viewpoint, the endurance of stress by local industry players might have altered respondent views on collaboration, competition and other related clustering characteristics. Especially with regards to feeling concerning local and national associations where very little assistance was available to tourism businesses.

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Note

[1]The Cluster Consortium identified seven potential clustering locations to introduce collaborative clustering incentives bringing multiple stakeholders, government policymakers and tourism planners. The aim was to initiate a large-scale movement of tourism economic development in the selected regions (see Nordin, 2003, pp.50–58).