RESEARCH ARTICLE

WILEY

Perceived threat of informal players: Enhancing the operational performance of inbound tour operators through coopetition

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Abstract

This paper explores the effect of the perceived threat of informal tourism actors on the operational performance of formal actors. Based on data collected from 130 inbound tour operators, the paper develops and tests a conceptual model representing the effect of the perceived threat of informal actors. The analysis has revealed a complementary partial mediation effect of the perceived threat of informal actors on operational performance. The perceived threat of informal actors is significantly associated with operating performance, both directly and indirectly, via increased coopetition among tour operators. The findings provide a basis for theoretical and managerial recommendations.

French version

Version française :

Cet article explore les effets de la menace apparente des entrepreneurs du tourisme informel sur la performance opérationnelle des acteurs formels. Il s'appuie sur les données collectées auprès d'un échantillon de 130 agences réceptifs. Aussi, il développe et teste un modèle conceptuel qui représente ce qui est perçue comme l'effet de la menace des acteurs informels. L'analyse a révélé un effet complémentaire de médiation partielle de la menace perçue des acteurs informels sur la performance opérationnelle. La menace perçue des acteurs informels est significativement associée, directement et indirectement, à la performance opérationnelle, à travers une coopétition accrue entre les réceptifs. Les résultats d'analyse constituent une base des recommandations théorique et managériales.

Mots clés

Coopétition

KEYWORDS

coopetition, inbound tour operators, informal entrepreneurs, operational performance

1 | INTRODUCTION

While the informal economy was previously addressed mainly by economists, the concept has recently attracted multidisciplinary scholarly attention. Drawing its origin from Hartz in 1972, the informal economy has now become one of the widely researched areas (Alrawadieh & Alrawadieh, 2018; Çakmak, 2020; Çakmak et al., 2018; Kelmanson et al., 2019; Mwesiumo et al., 2021; Richard &

Cleveland, 2016; Williams & Oz-Yalaman, 2020). The informal economy exists globally, but its magnitude varies from one country to another. However, it is more predominant in developing countries than in developed nations. According to the International Labour Organization (2020), 61 per cent of the world employment is derived from the informal economy.

The informal sector is well known for its favourable impact on the economy of tourism destinations. For instance, it contributes to generating employment among unskilled workers, incubating emerging firms, supporting low-income families and providing formalised firms with competitiveness and increased business performance (Ali, 2017; Mwesiumo et al., 2021). Despite these advantages, the underground economy has multiple adverse effects. These include the loss of government revenues, erosion of destination image and destination trust, imposing unfair competition among the formalised companies, and increased crime rate (Mwesiumo et al., 2021). Therefore, despite several efforts taken by tourism destinations to attract tourists (Kumar & Dhir, 2020), the presence of informality may jeopardise their performance.

Tourism and hospitality scholars have highlighted several aspects related to the informal actors (e.g., Çakmak, 2020; Çakmak et al., 2019; Çakmak & Çenesiz, 2020; Dahles, 1998; Kedir et al., 2018; Mwesiumo et al., 2021; Trupp & Sunanta, 2017). For instance, Mwesiumo et al. (2021) studied informal entrepreneurs' effects on formalised tour operators' business performance. Using activity-based theory, they found that service quality and acquisition efforts are essential variables that trigger the business performance of tour operators. Trupp and Sunanta (2017) investigated the informal economy in the eyes of souvenirs street vendors, one of the neglected groups in Thailand's tourism industry. They found that souvenirs vending helps women earn income, which in turn enhances gender inequality. Çakmak et al. (2019) examined the informal actors' capital conversion and capital usage. Their analysis revealed that several types of capital are suitable for different informal actors based on their development stage. For instance, they found that symbolic and cultural capital is ideal for small and medium-sized informal players.

While the extant body of literature in tourism and hospitality provide valuable insights regarding informal players, there are several facets of this phenomenon that remain unexplored. One of these facets is the effect of informal actors on the operational performance of formal actors. Formal tourism actors operating in developing countries often complain about unfair competition from their informal peers. Their complaints are understandable considering all the regulatory challenges that they go through, including bureaucratic business registration process, paying high taxes and fees, waiting in line for permits and undergoing continuous scrutiny from government agencies. In contrast, informal actors do not spend resources to comply with these regulatory hurdles. As such, formal actors tend to have higher operating costs compared with their informal counterparts (Mwesiumo et al., 2021). Therefore, an intriguing question is: how does the presence of informal actors affect the operational performance of formal actors?

To contribute to the body of knowledge related to the informal actors in the tourism industry, the present study develops and tests a theory-driven model that explores a potential mediating role of coopetition in the relation between perceived threat of informal actors and the operational performance of their formal peers. In other words, we explore the effect of perceived threat of informal actors on the tendency of formal actors to cooperate and compete, and the implication on their operational performance. Exploring coopetition as one of the potential mechanisms linking the threat of informal actors and the operational performance of the formal actors is interesting because, as Damayanti et al. (2017) suggests, coopetition can help actors deal with uncertainty and challenges posed by external business environment. Since there is a considerable body of knowledge related to the focal variables addressed in this study, taking a deductive approach, that is developing and testing hypotheses, was deemed appropriate. Thus, this study offers insights that are valuable not only for tourism discipline but also for other disciplines where concepts such as coopetition and operational performance are relevant.

The remainder of the paper proceeds as follows. The following section reviews the existing literature related to the key concepts addressed in this study. This is followed by the methodological section where sampling, research strategy, data collection and measures are described. Subsequently, the analysis section is presented, followed by findings and discussion sections. The conclusion section highlights the limitations of the study and areas for further studies.

2 | LITERATURE REVIEW AND HYPOTHESES

2.1 | Informal actors

While informality has been one of the existing features of all economic sectors, the tourism industry is one of the most affected sectors, especially in developing countries (Mwesiumo et al., 2021; Omri, 2020). Informal entrepreneurs, also known as informal actors or informal players, refer to the individuals or firms operating underground without registering their businesses to the government for taxation and regulation (Williams & Martinez, 2014). Examples include beach boys, unlicensed tax drivers, freelance tour guides (Mwesiumo et al., 2021) and street vendors and pedicab drivers (Damayanti et al., 2017). The advent of the internet since the 1990s significantly increased the momentum of the informal sector. The internet's contribution to disintermediation is immense as it provides customers with direct access to service providers. Thus, today's customers can easily access and interact with potential service providers (formal or informal actors) and make price comparisons. Prior research has divided informal actors into two main categories. The first group classifies informal entrepreneurs based on their size (Çakmak et al., 2019), while the second classification is based on the magnitude of formality and informality (Williams & Nadin, 2012). The size-based criterion divides informal players into freelancers, small, medium-sized and large informal entrepreneurs. The magnitude-based classification categorises informal players into permanent wholly, temporary wholly, permanent partially and temporary partially informal actors.

Although formal tourism actors compete among themselves, they also face competition from informal actors (Mwesiumo et al., 2021). For instance, formal tour operators who, among other services,

provide tour guiding service, can face competition from freelance tour guides. Likewise, registered transport companies that provide transfer services in destinations can face significant competition from unlicensed taxis. Due to competition from informal actors, formalised firms engage in several activities and employ multiple techniques to secure competitive advantages (Damayanti et al., 2017; Della Corte & Aria, 2016). These strategies include differentiating themselves from informal actors in terms of service quality and reliability.

2.2 | Informal actors and operational performance

Operational performance refers to the firm's capacity to produce and deliver its services and products efficiently and professionally (Zhu et al., 2008). In a B2B environment, operating performance is mainly equated with physical service attributes (Stank, Goldsby, and Vickery 1999, p. 430). Thus, service reliability (dependability and accuracy), service effectiveness and on-time service delivery are typical operating performance examples. The disruptive innovation theory suggests that the entry of informal players can trigger the efforts of the formalised firms to enhance their operational performance to mitigate the perceived danger imposed by the informal actors (Christensen, 1997; Christensen et al., 2015). Likewise, the resource-based view suggests that firms use valuable, scarce and inimitable resources to create and maintain competitive advantage. As formalised firms tend to have relatively more resources than their informal counterparts, they are more likely to use their resources to boost operational performance (Seyitoğlu & Ivanov, 2020). The resources help formalised tour operators differentiate themselves from competitors, one of the most reliable approaches to securing competitiveness in tour operation business (Picazo & Moreno-gil, 2018).

Furthermore, they can use their financial resources to enhance the delivery of their services. This can occur, for example, by replacing their old vehicles with new ones, enhancing their technological know-how to attract customers, and providing training to their employees to improve their operating performance. Previous research has underscored that competition intensity stimulates competitiveness (Ali, 2017; Darbi, 2016). Likewise, the perceived danger from the informal actors can trigger the efforts of the formalised players to enhance their services quality and their efforts to acquire customers (Mwesiumo et al., 2021). Accordingly, the present study argues that the perceived threat of informal actors is likely to motivate formal actors to unleash efforts to increase their competitiveness, which will lead to improved operational performance. Hence, the following hypothesis is proposed:

> **H1.** As the perceived threat of informal actors increases, so does the operational performance of formalised firms.

2.3 | Coopetition among tourism actors

Firms may collaborate with their competitors to enhance their strength in a competitive business environment (Della Corte &

Aria, 2016). Collaboration among competitors is technically known as coopetition. However, Bengtsson and Kock (2014) refine this conception of coopetition and suggest that it is more precise to consider it as 'a paradoxical relationship between two or more actors, regardless of whether they are in horizontal or vertical relationships, simultaneously involved in cooperative and competitive interactions'. All in all, coopetition involves competitors that cooperate on some value-creating activities while competing on other activities (Rusko 2011). For example, firms may compete on activities such as production and logistics and collaborate on other activities such as sales marketing. In addition, coopetition is related to several benefits such as the increased possibility of developing new products, improved market position, increased flexibility and lower costs. Thus, one can say that coopetition occurs when a tourism actor cannot attain a certain goal alone and thus decides to join forces with a competitor (Grauslund & Hammershøy, 2021; Von Friedrichs Grängsjö & Gummesson, 2006).

Considering the interdependence and complementarity nature of the tourism industry (Mwesiumo & Halpern, 2016; Mwesiumo & Halpern, 2019), coopetition should be one of the fundamental topics in tourism research (Chim-Miki & Batista-Canino, 2017). Indeed, several studies have addressed issues related to coopetition in tourism. For instance, Della Corte and Aria (2016) investigated the role of coopetition among small and medium tourism enterprises and found that it helps to improve performance. Likewise, Czernek and Czakon (2016) explored trust-building processes in coopetition among tourism firms, while Suhartanto (2017) examined the role of store coopetition and attractiveness on the performance of tourism destinations and its retail stores.

Overall, coopetitive behaviours are advantageous to firms as they provide room for knowledge sharing (Tsai, 2002), enhance the financial performance (Luo et al., 2006), a foundation to overall competitive advantage (Bengtsson & Kock, 2014; Czakon & Czernek, 2016), motivating marketing performance (Grängsjö, 2003; Wang & Krakover, 2008), enhancing the co-creation (Lorgnier & Su, 2014) and delivering economies of scale (Kylänen & Rusko, 2011). Consequently, the practice of coopetition is prevalent even among informal tourism actors. For example, Damayanti et al. (2017) examined coopetitive behaviours among informal actors consisting of street vendors and pedicab drivers in Yogyakarta. Their analysis revealed the existence of both simultaneous and sequential coopetition among these actors. While the former is performed at the same time, the latter has a time lag. Simultaneous coopetition is based on attaining multiple resources such as customers, space and time, sequential coopetition usually occurs when the actors share a single resource, such as customers (Damayanti et al., 2017, 2018).

In sum, coopetition is viewed as a means for increasing competitiveness among tourism enterprises (Chim-Miki & Batista-Canino, 2017). As such, we argue that the perceived threat of informal players is likely to trigger a strategic response among formal players to increase their competitiveness and mitigate the danger. Given the collaborative and complementary nature of the tourism industry, we contend that such a response includes increased coopetition. Furthermore, due to its benefits, such as increasing flexibility, we

argue that increased coopetition should result in increased operational performance. Based on this reasoning, we posit the following hypotheses:

> **H2.** The perceived threat of informal actors is positively associated with coopetition among formal actors.

> **H3.** Coopetition is positively associated with the operational performance of the formal actors.

3 | METHODOLOGY

3.1 | Description of the context and data collection

This study was conducted in Zanzibar, one of the two countries forming the United Republic of Tanzania. It is one of the beautiful islands in the Indian Ocean, located 35 km off the Tanzania mainland (Sharpley & Ussi, 2012). Before the onset of the COVID-19 pandemic, the destination received over 500,000 tourists annually, mainly from western Europe (RGoZ, 2019). While the island laws provide guidelines for individuals and firms to operate tourism activities (*The Zanzibar Tourism Act No. 6 of 2009*, 1996), there is a significant number of informal tourism actors. For instance, although section 19 of the

Zanzibar tourism act requires only registered and licenced tour operators to conduct tour operation activities, many actors such as taxi and private hire drivers, hotels staff, freelance tour guides and beach boys engage in tour operating activities informally (Mwesiumo et al., 2021). In 2010, the Zanzibar Association of Tour operators found that that over 60 per cent of the transfers and excursions conducted in Zanzibar were operated informally (ZATO, 2010). The informal actors coexist with their formal counterparts, but the relationship between them is hostile. While the formalised firms pay tax at the Zanzibar Revenue Board (ZRB) and the Tanzania Revenue Authority (TRA) (Mahangila & Anderson, 2017), informal actors are not legally bound to pay the same. Currently, tour operators are required to pay 15 per cent as tour operators levy from each transaction they make and 30 per cent of the corporate tax from the profit they made. Conversely, the actors in the informal economy do not pay these taxes. For these reasons, the registered tour operators tend to charge higher prices compared with their informal competitors.

3.2 | Data collection

Data for this study were collected from the inbound tour operators through a self-administered questionnaire. The sample of the study was based on a list of 233 licenced tour operators from the Zanzibar Tourism Commission (RGoZ, 2020). Thus, a total of 233 questionnaires

TABLE 1 Measures of the constructs

Construct	Abbreviation	Indicator
Coopetition	COOP1	We cooperate with our competitors extensively
	COOP2	We share assets (e.g., equipment) with our competitors
	COOP3	We cooperate with our rivals to achieve a common goal
	COOP4	Active collaboration with rival firms is important to us
Operational performance	OP1	Our organisation has an on-time delivery performance.
	OP2	Our organisation is capable of delivering services to the market faster than informal players.
	OP3	Our organisation has a fast delivery.
	OP4	Our organisation delivers value for money services
	OP5	Our organisation tries its best to deliver services that meet the expectations of the customers.
	OP6	Our organisation has superior conformance to service specifications.
	OP7	Our organisation has superior service capability and performance.
The perceived threat of informal players	IPT1	Informal players seriously threaten the existence of our company.
	IPT2	Anything we can offer; informal players can match easily.
	IPT3	Informal players force our company to pay our staff lower salaries.
	IPT4	Informal players force us to lower the prices of our services.
	IPT5	Informal players do whatever it takes to steal our clients.
Firm size	FS1	Firm's number of departments
	FS2	Firm's number of employees
Firm age	FA	Number of business operation years
Contingency plan	COPL	If a business has a contingency plan for emergencies

were distributed to the registered and licenced tour operators in Zanzibar. We applied drop-off and pick-up method to collect data. This approach involved delivering questionnaires at the premises of the tour operators and collecting them afterwards. Since geographically Zanzibar is small, and most tour operators are located close to each other, the approach was deemed appropriate as it was likely to increase the response rate (Mwesiumo et al., 2019). In total, 150 questionnaires were returned and only 130 surveys were found usable after eliminating respondents with excessive missing values. The sample size accounts for about 56% of the sampling frame.

3.3 | Operationalisation of variables

Measures and scales employed in the present study (Table 1) were adopted from previous prominent studies. The indicators were measured on a 5-point Likert scale from 1 (strongly disagreed) to 5 (strongly agree). To measure the perceived effect of informal players, six items were adopted (Kwieciński, 2017). Operational performance (OP) was measured using indicators adopted from Masa'deh et al. (2017) and Nabass and Abdallah (2019). Finally, coopetition was operationalised by four indicators based on Bouncken et al. (2018). In addition to the focal variables, three variables were included as potential alternative explanations for the variation in tour operators' operational performance. These variables are firm size, age and the presence of a contingency plan. While firm size was determined by the number of employees and number of departments, firm's age was measured by the number of years a firm has been operating (Liu, 2017). We assumed that firm size and age are appropriate proxies for firm's resources and capabilities, which could lead to the increased operational performance. As for the contingency plan, the tour operators were asked whether they possessed or did not possess the plan. We assumed that having a contingency plan indicates strategic thinking, which might also lead to increased operational performance.

In line with Dolnicar et al. (2015), the measurement items were modified accordingly to fit the research context. Doing so would potentially result in insights that have meaningful implications for practice. To ensure content validity, four experts, two from academia and two from the industry, were consulted and their input led to the refinement of the questionnaire. Consequently, we conducted a pilot test with 20 questionnaires to assess the understandability of the

TABLE 2 Descriptive statistics of the measurement indicators

Indicator	Mean	SD
IPT1	3.923	1.225
IPT2	3.732	1.019
IPT3	3.769	1.354
IPT4	4.023	1.167
IPT5	4.377	0.905
COOP1	3.023	1.262
COOP2	4.069	1.032
COOP3	3.777	1.260
COOP4	4.069	1.017
OP1	4.162	1.036
OP2	4.146	1.024
OP3	4.054	0.931
OP4	3.812	1.142
OP5	4.349	0.950
OP6	4.008	0.916
OP7	4.238	0.875
FS1	2.969	1.381
FS2	10.846	15.740
FA	9.646	7.340
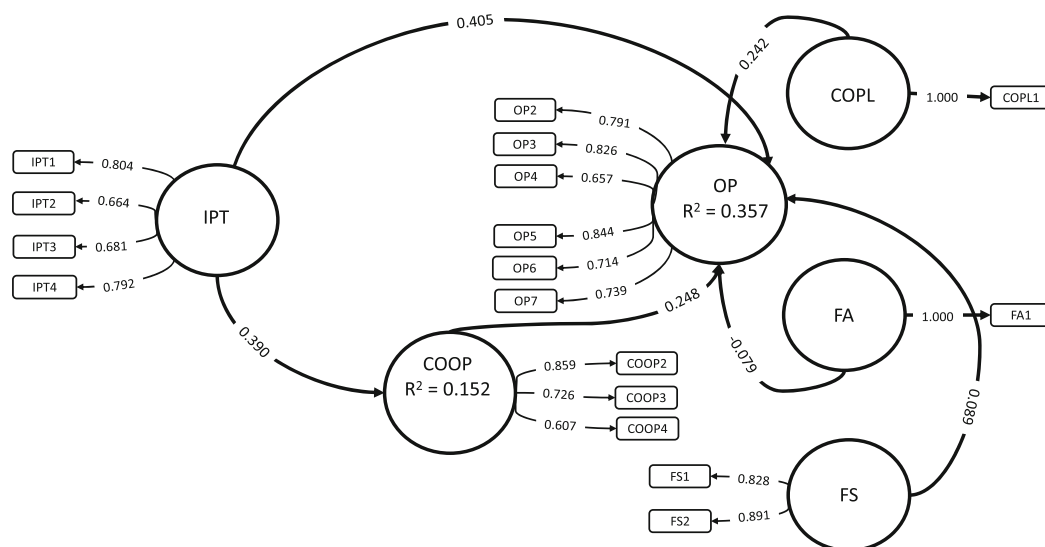
FIGURE 1 Structural model

items. Considering the responses obtained from the respondents, minor modifications were made to create a final version of the questionnaire. The instrument considered several ethical issues. First, we applied for the research permit to the vice president's office of the revolutionary government of Zanzibar. As a result, we were authorised to conduct the study.

3.4 | Addressing potential common method variance

Several techniques were considered to mitigate the threat of the common method variance (Podsakoff et al., 2003). For instance, the respondents were anonymously filling out the questionnaires. Thus, they were assured of the anonymity of their identities. Furthermore, the instrument included a statement like 'this study is voluntary; you may therefore withdraw from the study any time you wish to do so'. Finally, we changed the position of independent and dependent variables. The present study used a time lag design, where the data for independent and dependent variables were collected for the first time. The second time we collected the data for the mediating variable. In addition to procedural remedies, two statistical tests were considered. We conducted Harman's single factor and the results showed only 36.56% of the variance was accounted by a single factor. This is less than 50%, confirming that our data set does not suffer significantly from the common method variance (Podsakoff et al., 2003). Harman's single test was corroborated with the collinearity test, and all values were less than 3.3 (Kock, 2015).

4 | ANALYSIS

This section presents the analysis conducted in this study. It begins by reporting the descriptive statistics of the measurement indicators (Table 2), followed by the assessment of the measurement model.

4.1 | Measurement model assessment

The model was tested using partial least squares structural equation modelling (PLS-SEM). The choice of PLS-SEM is deemed appropriate because it is the most recommended approach for testing models that include mediation effects (Sarstedt et al., 2020). The present study's sample size of 130 meets the minimum requirement of 100 observations suggested by Assaker et al. (2012). Equally, the sample size aligns with the threshold recommended by Hair et al. (2017) for attaining a statistical power of 80 per cent. The estimated model is shown in Figure 1.

Based on the procedures suggested by Fornell and Larcker (1981), the assessment of the measurement model was conducted by considering the internal consistency, validity and reliability scores. Due to poor loadings, indicators IPT5, COOP1, and OP1 were eliminated from the measurement model. Subsequently, the reliability of the remaining

measures was established using Cronbach (CA), rho_A and composite reliability (CR). As reported in Table 3, the value of CA, rho_A and CR is above the proposed cut-off level of 0.7 (Ali et al., 2018). Equally, the average variance extracted (AVE) is above the recommended threshold of 0.50 (Fornell & Larcker, 1981). Therefore, internal consistence reliability and convergent validity are established. Besides, we checked discriminant validity of the focal variables. As found in Table 4, discriminant validity is established based on the traditional Fornell-Lacker criterion (the square root of AVE is larger than the correlations between the constructs) and the heterotrait-monotrait (HTMT) ratio criterion (HTMT ratio values are less than 0.85) (Hair et al., 2019).

4.2 | Structural model assessment

After testing the measurement model and verifying its adequacy, the structural model was examined. First, the values of variance inflation factor (VIF) were examined. Accordingly, all the VIF values were lower than 5, suggesting the absence of multicollinearity problem. Next, bootstrapping with 5000 subsamples was run to check the significance of the path coefficients. Table 5 presents that there is a significant positive effect of a perceived threat of informal actors on both coopetition and operational performance.

TABLE 3 Internal consistency reliability and convergent validity

Items	Loadings	rho_A	Composite reliability	AVE
Coopetition				
COOP2	0.859	0.722	0.778	0.544
COOP3	0.726			
COOP4	0.607			
Perceived effect of informal player				
IPT1	0.804	0.755	0.826	0.545
IPT2	0.664			
IPT3	0.681			
IPT4	0.792			
Operational performance				
OP2	0.791	0.867	0.893	0.584
OP3	0.826			
OP4	0.657			
OP5	0.844			
OP6	0.714			
OP7	0.739			

TABLE 4 Assessment of discriminant validity

	COOP	IPT	OP
COOP	(0.738)[a]		
IPT	0.390 [0.503][b]	(0.738)[a]	
OP	0.412 [0.542][b]	0.477 [0.589][b]	(0.765)[a]

[a]Fornel-lacker (√ AVE).
[b]HTM ratio.

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TABLE 5 Structural model estimation

	Effect on COOP			Effect on OP			
	Coefficient	t-Value	p-Value	Coefficient	t-Value	p-Value	Significant
Direct effect							
IPT (H1)	0.390	4.231	0.000[a]				Yes
IPT (H2)				0.405	4.109	0.000[a]	Yes
COOP (H3)				0.248	2.700	0.007[a]	Yes
Control variables							
FS				0.089	0.779	0.436	No
AGE				−0.079	1.146	0.252	No
COPL				0.242	2.915	0.004	Yes
Indirect effect							
IPT				0.096	2.487	0.013	Yes
R^2	0.152			0.357			
Adj. R^2	0.145			0.331			
Q^2	0.053			0.182			

Note: Significance (two = tailed test): [a]significant at $p \leq 0.01$; [b]significant at $p \leq 0.05$.

TABLE 6 Results of PLS predict

	PLS-SEM		LM		
	RMSE	Q^2_predict	RMSE	PLS_RMSE – LM_RMSE	
OP2	0.981	0.101	1003	−0.022	
OP3	0.868	0.144	0.891	−0.023	
OP4	1088	0.107	1113	−0.025	
OP5	0.887	0.142	0.903	−0.016	
OP6	0.883	0.085	0.908	−0.025	
OP7	0.860	0.048	0.874	−0.014	

TABLE 7 NCA results

	Effect size	Bottleneck										
IPT	0.148**	NN	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	50.0
COOP	0.047ns	NN	NN	NN	NN	NN	NN	NN	1.0	1.0	15.4	64.3
Y	—	0	10	20	30	40	50	60	70	80	90	100

Note: The effect size is based on the ceiling envelopment–free disposal hull ceiling (ce-fdh). Significance testing was performed with 10,000 permutations. Abbreviations: NCA, necessary condition analysis; ns, not significant.
**$p < 0.05$.

Likewise, coopetition has a significant effect on operational performance. Following Shmueli et al. (2019), we conducted PLSpredict to determine the predictive power of the model. As found in Table 6, all the values of RMSE from PLS-SEM are lower than those from the naïve LM benchmark, indicating that the model has high predictive power.

4.3 | Findings

This section presents the results of the analysis corresponding to the hypotheses. The first hypothesis stated that as the perceived threat of

informal actors increases, so does the operational performance of formalised firms. This hypothesis is supported as the path coefficient between perceived threat of informal actors and formal tour operators' operating performance is positive and significant at $p < 0.01$. The second hypothesis suggested that the perceived threat of informal actors is positively associated with coopetition among formal actors. This hypothesis is supported as the coefficient of the path between the perceived threat of informal actors, and coopetition is positive and significant at $p < 0.01$. Finally, the third hypothesis stated that coopetition is positively associated with the operational performance of the formal actors. This hypothesis is also supported as the path coefficient

between coopetition, and operational performance is positive and significant at $p < 0.01$.

Further analysis shows that the direct effect of a perceived threat of informal actors and operational performance is also significant, suggesting that the perceived threat of informal actors has both direct and indirect association with the operating performance of the formal actors. According to Zhao et al.'s (2010) classification of mediation effects, the model exhibits a positive complementary partial mediation effect. Among the variables included to account for potential alternative explanations, only the presence contingency plan has a significant effect. The results show that having a contingency plan is associated with increased operational performance among formal actors.

4.4 | Necessary condition analysis

The PLS-SEM results suggest that both perceived threat of informal players and coopetition have significant effect on the operational performance of formal tour operators. Subsequently, we conducted necessary condition analysis (NCA) to determine whether they are also necessary conditions for the increased operational performance of formal tour operators. The presence of a necessary condition enables the occurrence of an outcome while its absence constrains it. According to Dul et al. (2020), at least three conditions are necessary (but not sufficient) to declare a necessary condition, including theoretical justification, considerable effect size ($d > 0$), and a small p value. To perform NCA, we followed general guidelines provided by Dul (2021) and specific guidelines for combined use of PLS-SEM and NCA (Richter et al., 2020). The NCA results (Table 7) show that the perceived threat of informal actors is a necessary condition for the increase in operational performance of the formal tour operators, while coopetition is not. Considering the results of PLS-SEM and NCA, the conclusion is that on average, an increase in the perceived threat of informal players will increase operational performance of formal actors. In addition, a certain level of perceived threat of informal actors is necessary to attain increase in operational performance. Specifically, 50% perception of threat from informal actors is necessary to attain 100% increase in operational performance. In contrast, an increase in the involvement in coopetition increases operational performance of formal actors, but it is not a necessary condition for increased operational performance.

5 | DISCUSSION

This study set out to explore the effect of perceived threat of informal players on the operational performance of tourism formal actors. We have developed and tested empirically a theory-driven conceptual model, hypothesising an association between perceived threat of informal actors and operational performance of formal actors where coopetition among formal actors serves as the mediating factor. The findings of this study offer theoretical and actionable managerial

implications on issues related to informal actors in the tourism industry, as discussed below.

In terms of theory, the findings of this study are in line with the contention that perceived threat of informal players is associated with increased coopetition among formal actors and subsequently increasing their operational performance. Thus, the results support our reasoning that perceived threat of informal actors is a significant external pressure that can trigger a strategic response from formal actors in the form of increasing coopetition among them. Furthermore, the results suggest that coopetition, as hypothesised, has a significant effect on the operational performance of formal actors. These findings are consistent with previous studies that emphasise the positive role of coopetition among actors in the tourism industry (e.g., Damayanti et al., 2017; Della Corte & Aria, 2016). Interestingly, the direct effect of perceived threat of informal players on the operational performance of formal actors is also significant, indicating a partial mediating effect of coopetition. This means that perceived threat of informal actors can increase operational performance of formal actors even if formal actors do not engage in coopetition. In other words, perceived threat of informal actors has other mechanisms for triggering increased operational performance besides engendering coopetition.

The PLS-SEM results are complemented by the NCA results, which revealed that perceived threat of informal actors is a necessary condition for increased operational performance. This suggests that the presence of competitive environment, including that caused by informal actors, can serve as a catalyst for formal actors to increase their operational performance to stay competitive. However, the results suggest there is one or more other factors that contribute to increased operational performance. We had assumed that such factors might include internal resources and capabilities. Thus, we included firm size and age as potential alternative explanations for increased operational performance. Theoretically, our assumption was that large tour operators would have more resources and therefore could improve their operations even without engaging in coopetition or even without being pressured by the threat of informal actors. Likewise, we assumed that experienced tour operators, as measured by the number of years they been in the business, would have developed capabilities to improve their operations even without engaging in coopetition. As the coefficients of the paths linking these variables and operational performance of the tour operators are not significant, our theoretical assumptions are not supported empirically. In contrast, our results suggest that formal actors that maintain a contingency plan are likely to have a strategic orientation which in turn is associated with increased operational performance.

As for managers of formalised tourism enterprises, the findings offer valuable insights that can guide their actions. The significant association between the threat of informal actors and coopetition suggests that coopetition is partly applied as a tool for countering the threat of informal actors. Taking it together with the observation that coopetition is significantly associated with operational performance, our results support the notion that 'in unity there is strength'. In other

words, the results affirm the assertion that collaboration is critical for value creation among actors in the tourism industry (Mwesiumo & Halpern, 2016). As such, we urge tourism actors to strongly consider collaborating with other actors, including their close competitors. Our results show that such collaboration can help them increase their operational performance. In the context of tour operators, the collaboration may occur in the form of knowledge exchange and sharing of resources such as vehicles and tour guides to minimise costs. For instance, when a tour operator's vehicles are fully occupied, they can seek assistance from another tour operator. Likewise, a tour operator can borrow personnel such as tour guides from another formalised firm. In the face of global challenges such as climate change, we encourage formal tourism actors to expand their collaboration to include other aspects, especially environmental sustainability initiatives. In addition to saving the environment, such collaborative efforts can serve as an additional value proposition that appeals to clients who are increasingly becoming concerned about sustainability (Mwesiumo et al., 2022).

Furthermore, the results suggest that formalised operators tend to respond to the threat of informal actors by improving their operational performance. As for tour operators, such improvement can involve replacing their tour vehicles with new ones, improving their technological know-how and training their tour guides to enhance service quality. Thus, although informal enterprises in tourism are often viewed as harmful to formal actors (Mwesiumo et al., 2021), their presence seems to challenge formal actors to improve their operations. Finally, although improved services may focus on differentiating offerings, we recommend that operational excellence should also explore ways to cut costs. This is because informal actors primarily use cost leadership as their strength and considering that tourism products are price sensitive (Mwesiumo, 2019), lower costs can attract a considerable number of clients. Therefore, we recommend that formalised tourism firms should find ways to reduce their operational costs and thus be able to charge lower prices. For instance, formalised tour operators may share big vehicles and propose to clients sharing excursions.

6 | CONCLUSION

The present study set out to investigate the effect of the perceived threat of informal players in the tourism industry on the operational performance of formalised firms. The analysis showed that the perceived threat of informal actors is significantly associated with operational performance, both directly and via increased coopetition among tour operators. Based on these findings, theoretical and actionable managerial recommendations have been discussed. Despite its valuable contribution, the present study has some limitations that provide avenue for future studies. First, the study is based on data collected from one destination, which may limit generalisability of the findings. Since the incidence of informal tourism business is common in many developing countries, future studies can collect data from other destinations to validate the current

study's findings. Second, according to Zhao, Lynch and Chen (2010), the presence of complementary mediation effect suggests other potential mediators linking the perceived threat of informal players and operational performance. As such, future studies can explore other possible mediating variables to ascertain their effects on operational performance. Third, this paper did not examine the nature of coopetition among the tour operators. Since coopetition can manifest in different forms [e.g., simultaneous vs. sequential (Damayanti et al. (2017)], future studies may explore the implications of different forms of coopetition among formal actors on their operational performance. Finally, it would be interesting to see future studies that explore the tensions and relationships between informal and formal tourism actors.

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REFERENCES

Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*, *30*(1), 514–538. https://doi.org/10.1108/IJCHM-10-2016-0568

Ali, N. (2017). *Towards a better integration of the informal sector: Three empirical essays on the interaction between formal and informal firms in Egypt and beyond. (Issue Ea 437)*. L'université Paris-Est.

Alrawadieh, Z., & Alrawadieh, Z. (2018). Exploring entrepreneurship in the sharing accommodation sector: Empirical evidence from a developing country. *Tourism Management Perspectives*, *28*, 179–188. https://doi.org/10.1016/j.tmp.2018.09.001

Assaker, G., Huang, S. S., & Hallak, R. (2012). Applications of partial least squares structural equation modeling in tourism research: A methodological review. *Tourism Analysis*, *17*(5), 679–686. https://doi.org/10.3727/108354212X13485873914128

Bengtsson, M., & Kock, S. (2014). Coopetition—Quo vadis? Past accomplishments and future challenges. *Industrial Marketing Management*, *43*(2), 180–188. https://doi.org/10.1016/J.INDMARMAN.2014.02.015

Bouncken, R. B., Fredrich, V., Ritala, P., & Kraus, S. (2018). Coopetition in new product development alliances: Advantages and tensions for incremental and radical innovation. *British Journal of Management*, *29*(3), 391–410. https://doi.org/10.1111/1467-8551.12213

Çakmak, E. (2020). *The practice of informal tourism entrepreuners: A bourdieusian perspective*. Wageningen University & Research. https://doi.org/10.18174/507882

Çakmak, E., Lie, R., & McCabe, S. (2018). Reframing informal tourism entrepreneurial practices: Capital and field relations structuring the informal tourism economy of Chiang Mai. *Annals of Tourism Research*, *72*, 37–47. https://doi.org/10.1016/j.annals.2018.06.003

Çakmak, E., Lie, R., & Selwyn, T. (2019). Informal tourism entrepreneurs' capital usage and conversion. *Current Issues in Tourism*, *22*(18), 2250–2265. https://doi.org/10.1080/13683500.2018.1448763

Çakmak, E., & Çenesiz, M. A. (2020). Measuring the size of the informal tourism economy in Thailand. *International Journal of Tourism Research*, *22*, 637–652. https://doi.org/10.1002/jtr.2362

Chim-Miki, A. F., & Batista-Canino, R. M. (2017). Tourism coopetition: An introduction to the subject and a research agenda. *International*

Business Review, 26(6), 1208–1217. https://doi.org/10.1016/J.IBUSREV.2017.05.003

Christensen, C. M., Raynor, M., & McDonald, R. (2015). *What is disruptive innovation?* Harvard Business Review.

Christensen, M. C. (1997). *Innovators Dilemma*. Harvard Business School.

Czakon, W., & Czernek, K. (2016). The role of trust-building mechanisms in entering into network coopetition: The case of tourism networks in Poland. *Industrial Marketing Management*, 57, 64–74. https://doi.org/10.1016/J.INDMARMAN.2016.05.010

Czernek, K., & Czakon, W. (2016). Trust-building processes in tourist coopetition: The case of a Polish region. *Tourism Management*, 52, 380–394. https://doi.org/10.1016/j.tourman.2015.07.009

Dahles, H. (1998). Tourism, government policy, and petty entrepreneurs in Indonesia. *South East Asia Research*, 6(1), 73–98. https://doi.org/10.1177/0967828X9800600105

Damayanti, M., Scott, N., & Ruhanen, L. (2017). Coopetitive behaviours in an informal tourism economy. *Annals of Tourism Research*, 65, 25–35. https://doi.org/10.1016/j.annals.2017.04.007

Damayanti, M., Scott, N., & Ruhanen, L. (2018). Space for the informal tourism economy. *Service Industries Journal*, 38, 772–788. https://doi.org/10.1080/02642069.2018.1480014

Darbi, P. W. K. (2016). *Strategy practice in the informal economy: A case from strategic networking of informal printing businesses in Ghana a thesis submitted in fulfilment of the requirements for the degree of doctor of philosophy in management at the University of Canterbury*. University of Canterbury.

Della Corte, V., & Aria, M. (2016). Coopetition and sustainable competitive advantage. The case of tourist destinations. *Tourism Management*, 54, 524–540. https://doi.org/10.1016/j.tourman.2015.12.009

Dolnicar, S., Coltman, T., & Sharma, R. (2015). Do satisfied tourists really intend to come back? Three concerns with empirical studies of the link between satisfaction and behavioral intention. *Journal of Travel Research*, 54(2), 152–178. https://doi.org/10.1177/0047287513513167

Dul, J. (2021). Advances in necessary condition analysis. https://bookdown.org/ncabook/advanced_nca2/

Dul, J., van der Laan, E., & Kuik, R. (2020). A statistical significance test for necessary condition analysis. *Organizational Research Methods*, 23(2), 385–395. https://doi.org/10.1177/1094428118795272

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.2307/3151312

Grauslund, D., & Hammershøy, A. (2021). Patterns of network coopetition in a merged tourism destination. *Scandinavian Journal of Hospitality and Tourism*, 21(2), 192–211. https://doi.org/10.1080/15022250.2021.1877192

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM)*. Sage Publications.

Hair, J. F., Sarstedt, M., & Ringle, C. M. (2019). Rethinking some of the rethinking of partial least squares. *European Journal of Marketing*, 53(4), 566–584. https://doi.org/10.1108/EJM-10-2018-0665

International Labour Organization, (ILO). (2020). *Impact of lockdown measures on the informal economy (issue April)*. International Labour Organization.

Kedir, A. M., Williams, C., & Altinay, L. (2018). Services industries and the informal economy: An introduction. *Service Industries Journal*, 38(11–12), 645–649. https://doi.org/10.1080/02642069.2018.1486959

Kelmanson, B., Kirabaeva, K., Medina, L., Mircheva, B., & Weiss, J. (2019). Explaining the shadow economy in Europe: Size, causes and policy options, *IMF Working Papers*, 2019(278). https://doi.org/10.5089/9781513520698.001

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, 11(4), 1–10. https://doi.org/10.4018/ijec.2015100101

Kumar, S., & Dhir, A. (2020). Associations between travel and tourism competitiveness and culture. *Journal of Destination Marketing & Management*, 18, 100501.

Kwieciński, D. (2017). Measures of competitive intensity – Analysis based on literature review. *Journal of Management and Business Administration. Central Europe*, 25(1), 53–77. https://doi.org/10.7206/jmba.ce.2450-7814.189

Kylänen, M., & Rusko, R. (2011). Unintentional coopetition in the service industries: The caseof Pyhä-Luosto tourism destination in the Finnish Lapland. *European Management Journal*, 29(3), 193–205. https://doi.org/10.1016/J.EMJ.2010.10.006

Liu, C. H. (2017). The relationships among intellectual capital, social capital, and performance – The moderating role of business ties and environmental uncertainty. *Tourism Management*, 61, 553–561. https://doi.org/10.1016/j.tourman.2017.03.017

Lorgnier, N., & Su, C. J. (2014). Considering coopetition strategies in sport tourism networks: A look at the nonprofit nautical sports clubs on the northern coast of France. *European Sport Management Quarterly*, 14(1), 87–109. https://doi.org/10.1080/16184742.2013.876436

Luo, X., Slotegraaf, R. J., & Pan, X. (2006). Cross-functional "Coopetition": The simultaneous role of cooperation and competition within firms. *Journal of Marketing*, 70(2), 67–80. https://doi.org/10.1509/JMKG.70.2.067

Mahangila, D., & Anderson, W. (2017). Tax administrative burdens in the tourism sector in Zanzibar: Stakeholders' perspectives. *SAGE Open*, 7(4), 215824401773680. https://doi.org/10.1177/2158244017736800

Masa'deh, R., Alananzeh, O., Algiatheen, N., Ryati, R., Albayyari, R., & Tarhini, A. (2017). The impact of employee's perception of implementing green supply chain management on hotel's economic and operational performance. *Journal of Hospitality and Tourism Technology*, 8(3), 395–416. https://doi.org/10.1108/JHTT-02-2017-0011

Mwesiumo, D., Halpern, N., & Buvik, A. (2019). Effect of detailed contracts and partner irreplaceability on interfirm conflict in cross-border package tour operations: Inbound tour Operator's perspective. *Journal of Travel Research*, 58(2), 298–312. https://doi.org/10.1177/0047287517746016

Mwesiumo, D. (2019). Instilling problem solving orientation in tourism interfirm exchanges through exercise of relational behaviours. *e-Review of Tourism Research*, 16(4), 308–331. https://ertr-ojs-tamu.tdl.org/ertr/index.php/ertr/article/view/373

Mwesiumo, D., Abdalla, J., Öztüren, A., & Kılıç, H. (2021). Effect of a perceived threat of informal actors on the business performance of formal actors: Inbound tour operators' perspective. *Journal of Travel & Tourism Marketing*, 38(5), 527–540. https://doi.org/10.1080/10548408.2021.1952146

Mwesiumo, D., Halfdanarson, J., & Shlopak, M. (2022). Navigating the early stages of a large sustainability-oriented rural tourism development project: Lessons from Træna, Norway. *Tourism Management*, 89, 104456. https://doi.org/10.1016/J.TOURMAN.2021.104456

Mwesiumo, D., & Halpern, N. (2016). Interfirm conflicts in tourism value chains. *Tourism Review*, 71(4), 259–271. https://doi.org/10.1108/TR-07-2016-0020

Mwesiumo, D., & Halpern, N. (2019). A review of empirical research on interorganizational relations in tourism. *Current Issues in Tourism*, 22(4), 428–455. https://doi.org/10.1080/13683500.2017.1390554

Nabass, E. H., & Abdallah, A. B. (2019). Agile manufacturing and business performance: The indirect effects of operational performance dimensions. *Business Process Management Journal*, 25(4), 647–666. https://doi.org/10.1108/BPMJ-07-2017-0202

Omri, A. (2020). Formal versus informal entrepreneurship in emerging economies: The roles of governance and the financial sector. *Journal of Business Research*, 108, 277–290. https://doi.org/10.1016/j.jbusres.2019.11.027

Picazo, P., & Moreno-gil, S. (2018). Tour operators' marketing strategies and their impact on prices of sun and beach package holidays. *Journal of Hospitality and Tourism Management*, *35*, 17–28.

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), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Richard, B., & Cleveland, S. (2016). The future of hotel chains. *Journal of Vacation Marketing*, *22*, 239–248. https://doi.org/10.1177/1356766715623827

Richter, N. F., Schubring, S., Hauff, S., Ringle, C. M., & Sarstedt, M. (2020). When predictors of outcomes are necessary: Guidelines for the combined use of PLS-SEM and NCA. *Industrial Management and Data Systems*, *120*(12), 2243–2267. https://doi.org/10.1108/IMDS-11-2019-0638/FULL/PDF

RGoZ (2019). *Zanzibar statistical abstract 2019*.

RGoZ. (2020). *Zanzibar hotels and tour operators list_ 2020*.

RGoZ. The Zanzibar Tourism Act No. 6 of 2009, (1996) (testimony of RGoZ).

Rusko, R. (2011). Exploring the concept of coopetition: A typology for the strategic moves of the Finnish forest industry. *Industrial Marketing Management*, *40*(2), 311–320. https://doi.org/10.1016/J.INDMARMAN.2010.10.002

Sarstedt, M., Hair, J. F., Nitzl, C., Ringle, C. M., & Howard, M. C. (2020). Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses! *International Journal of Market Research*, *62*(3), 288–299. https://doi.org/10.1177/1470785320915686

Seyitoğlu, F., & Ivanov, S. (2020). A conceptual study of the strategic role of gastronomy in tourism destinations. *International Journal of Gastronomy and Food Science*, *21*, 100230. https://doi.org/10.1016/j.ijgfs.2020.100230

Sharpley, R., & Ussi, M. (2012). Tourism and governance in Small Island developing states (SIDS): The case of Zanzibar. *International Journal of Tourism Research*, *16*, 87–96. https://doi.org/10.1002/jtr.1904

Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, *53*(11), 2322–2347. https://doi.org/10.1108/EJM-02-2019-0189/FULL/XML

Stank, T. P., Goldsby, T. J., & Vickery, S. K. (1999). Effect of service supplier performance on satisfaction and loyalty of store managers in the fast food industry. *Journal of Operations Management*, *17*(4), 429–447.

Suhartanto, D. (2017). The role of store coopetition and attractiveness on the performance of tourism destination and its retail stores. *International Journal of Tourism Policy*, *7*(2), 151–165. https://doi.org/10.1504/IJTP.2017.085327

Trupp, A., & Sunanta, S. (2017). Gendered practices in urban ethnic tourism in Thailand. *Annals of Tourism Research*, *64*, 76–86. https://doi.org/10.1016/j.annals.2017.02.004

Tsai, W. (2002). Social structure of "coopetition" within a multiunit organization: Coordination, competition, and intraorganizational knowledge sharing. *Organization Science*, *13*(2), 179–190. https://doi.org/10.1287/ORSC.13.2.179.536

Von Friedrichs Grängsjö, Y., & Gummesson, E. (2006). Hotel networks and social capital in destination marketing. *International Journal of Service Industry Management*, *17*(1), 58–75. https://doi.org/10.1108/09564230610651589

von Grängsjö, Y. F. (2003). Destination networking: Co-opetition in peripheral surroundings. *International Journal of Physical Distribution and Logistics Management*, *33*(5), 427–448. https://doi.org/10.1108/09600030310481997/FULL/PD

Wang, Y., & Krakover, S. (2008). Destination marketing: Competition, cooperation or coopetition? *International Journal of Contemporary Hospitality Management*, *20*(2), 126–141. https://doi.org/10.1108/09596110810852122

Williams, C., & Martinez, A. (2014). Is the informal economy an incubator for new enterprise creation? A gender perspective. *International Journal of Entrepreneurial Behaviour and Research*, *20*(1), 4–19. https://doi.org/10.1108/IJEBR-05-2013-0075

Williams, C., & Oz-Yalaman, G. (2020). Explaining the informal economy in Western Europe: Beyond a rational economic actor perspective. *Journal of Economics Studies*, *48*, 1084–1096. https://doi.org/10.1108/JES-05-2020-0233

Williams, C. C., & Nadin, S. J. (2012). Tackling entrepreneurship in the informal economy: Evaluating the policy options. *Journal of Entrepreneurship and Public Policy.*, *1*, 111–124. https://doi.org/10.1108/20452101211261408

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*(2), 197–206. https://doi.org/10.1086/651257

ZATO. (2010). *Report on checkpoint transfersand excursions*. ZATO.

Zhu, Q., Sarkis, J., & Lai, K. (2008). Confirmation of a measurement model for green supply chain management practices implementation. *International Journal of Production Economics*, *111*(2), 261–273.