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RESEARCH ARTICLE

EFFECTS OF THE INDIVIDUALISM VS. COMMUNITARIANISM DIMENSION OF THE CULTURE OF THE ACTORS ON THE STRUCTURE OF COOPETITION BETWEEN VSES

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ARTICLE INFO	ABSTRACT
<i>Article History:</i> Received 14 th December, 2024 Received in revised form 09 th January, 2025 Accepted 28 th January 2025 Published online 27 th February, 2025 <i>Keywords:</i> Coopetition, Individualist culture, Communitarian culture, Cooperation, Competition.	This paper attempts to show the effect of the culture of the coopetitors on the two components of coopetition, between VSEs. Our methodology is quantitative exploratory based on data from a questionnaire administered to 652 drivers of eleven nationalities. Correspondence factor analysis and moderation and mediation tests were used to process the data. The exploration indicates that individualistic national and transnational cultures influence the structure of coopetition. The tests specify these influences. Indeed, the individualistic transnational culture of the actors has a negative moderating effect and a confounding effect on competitive coopetition. In addition, it negatively moderates balanced coopetition. Individualistic national culture has a positive moderating effect and an inconsistent mediating effect on competitive coopetition. The theoretical contribution of this research makes it possible to specify the cultural influences of the actors on the tensions between cooperation and competition in the dynamics of coopetition. Taking into account the cultural dimension and its influences makes it possible to theoretically specify the dosage between the components of coopetition. This consideration will allow managers to position themselves in their business relations on a national and/or transnational scale, to take advantage of this dynamic.

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INTRODUCTION

The impact of the culture of coopetitors on the structure of coopetition is an important topic in the field of strategy in the era of globalization and mobility. This research aims to explore how the culture of actors influences strategic decisions in environments where coopetition reigns on the one hand, and to specify the type of effect of culture on the components of coopetition between VSEs. These companies must juggle the need to cooperate with some actors while competing with others. This raises new challenges in strategy and organization. Social exchanges can be divided into trust, mutual influence, commitment and cultural contingencies (Rezaei et al., 2020). As for the cultural aspects that interest us, culture has always been treated with cooperation or, with competition. We take as evidence the work of Jakobse (2020) and Efrat & al. (2022). On the other hand, there are not many studies directly linking the culture of actors to coopetition. Ten years ago, Kane & Sall (2013) noted a research perspective that was to look in depth at the relationship between culture and coopetition. Knein & al. (2020) confirm that there are few studies on coopetition and culture. However, we note a growing interest from researchers on this subject, in particular, Ralandison & al. (2018) who propose as a perspective to study international and multicultural coopetitive agreements. Klimas (2016), in an exploratory study, describes how coopetition at the inter-organizational level is linked to culture, both in terms of cooperation and competition. In the vein of Klimas's (2016) study, Knein & al. (2020) theorize that organizational culture can play an

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important role in relation to coopetition. In their study on coopetition and culture, Knein & al. (2020) find that strong cultures can be linked to internal coopetition. However, this study focused mainly on national culture and did not consider subcultures. In our research, we consider the national and transnational culture of the actors. Furthermore, the work of Knein & al. (2020) focuses mainly on managers. However, no importance is given to how culture and coopetition are perceived by employees or other actors. Given the lack of information on employees' perceptions of coopetition and a possible link with culture, it would be beneficial to study this topic from the perspective of the coopetitors themselves, as in this paper. Such a study would provide a better understanding of how to achieve a balanced interaction of coopetitive behavior. Czakon & al. (2019) note that mobilizing phenomena such as culture can provide information on antecedents that are so far rarely explored in studies on coopetition (Klimas, 2016).

Thus, we ask the question "what is the influence of the culture of the coopetitors on the structure of coopetition between VSEs?" By culture of the actors, we mean the individualistic dimension and the communitarian dimension, borrowed from Trompenaars & Hampden-Turner (1997) and Hofstede (1991). Our objective is to show that the culture of the coopetitors has effects on the components of coopetition to result in either a cooperative coopetition, a competitive coopetition, or a balanced coopetition. The research field is a market where coopetition reigns between VSEs in the alternative transport sector. To address this question we follow a framework composed of a literature review on coopetition and culture, a research methodology, followed by the results, their discussions and the contributions of the research before concluding.

LITERATURE REVIEW: COOPETITION & CULTURE

We successively present the three concepts in this paper, the structure of coopetition between very small companies, culture and then culture in coopetition.

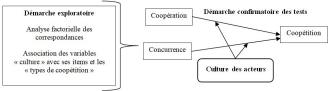
Structure of coopetition between very small companies: Coopetition, on the other hand, refers to the coexistence of cooperation and competition between market players. The cooperative strategy involves collaboration between different entities to achieve common goals, while the competitive strategy aims to gain a competitive advantage over other market players. The cooperative strategy focuses on collaboration between market players to achieve common goals. It involves the establishment of partnerships, alliances and networks in order to strengthen the company's position in the market. The cooperative strategy aims to promote long-term value creation by promoting the pooling of resources and skills. Companies that adopt this approach seek to leverage the benefits of cooperation while maintaining healthy competition with other market players, to ensure their sustainability. Competitive strategy plays an important role in differentiating and positioning the company in the market. Coopetitors must develop strategies that allow them to compete with other players while maintaining cooperative relationships.

Culture: definition and importance: Culture is considered as the set of knowledge, know-how, traditions, customs, distinctive traits, spiritual and material, intellectual and emotional, that characterize a society, a social group, an ethnic group, a nation or a civilization, as opposed to another group or nation. Culture provides the means, among other things, to forge one's own identity and to strengthen or preserve the feeling of belonging to a community. The basic cultural elements are language, cultural heritage, customs, arts, family and nationality. One of the functions of culture is to allow humans to adapt more easily to environments by producing behaviors and attitudes. Culture influences the environment, the way of interpreting things, the way of perceiving them, in humans. Culture is therefore very important, according to Hofstede because "human beings are group animals. They use language and empathy, and practice intergroup collaboration and competition. The unwritten rules on how they do things differ from one human group to another. "Culture" is the name that humans give to these unwritten rules on how to be a good member of the group." The value and potential of using a country's culture, values, and ideas influence others without violence or economic pressure (Damayanti, 2023). Culture influences the behaviors of individuals. Willmott (1993) suggests that culture is used to recognize and encourage desired behaviors.

Culture is also a tool for promoting understanding and cooperation between countries and people (Damayanti, 2023). It is an element of successful socialization, particularly in a community of coopetitors. For example, newcomers to a group move from the periphery to the center over time, they become more active and engaged in the culture of the community and more inclined to assume the role of expert (Castro Gonçalves & Guimarães, 2020, p. 85). This author also emphasizes that a participant integrates into activities defined through the social and cultural dimensions of collective practices. We retain the nationality of an individual which is also an element of culture. Thus, the nationality of coopetitors through their behaviors can have a significant influence on the structuring of the strategy. Cultural differences related to nationality can influence how individuals perceive coopetition and competitive and cooperative dynamics. For example, coopetitors of different nationalities may have divergent approaches to collaboration and competition, which can lead to tensions or synergies. It is therefore essential to analyze the influence of nationality by looking at two dimensions in particular, the communitarianism and individualism of the actors, a cultural element according to Trompenaars & Hampden-Turner (1997) and Hofstede (1991), on the practice of coopetition in order to understand how and explain how it can affect cooperative and competitive dynamics. According to the Trompenaars & Hampden-Turner model (1997), there are seven dimensions for international success and according to the Hofstede model, there are six dimensions for cultural comparison, one country to another (Haves & al., 2012, p. 49) including "individualism" and "communitarianism or collectivism". An individualistic culture is of course oriented towards the individual and his needs, while a collectivist culture is oriented towards the needs of the community and what is best for the group. These latter cultures are therefore oriented towards the achievement of common objectives and projects. These dimensions determine the degree to which individuals are linked to groups. The individualism scale shows the general characteristics of a society. If this index is high, the culture is more individualistic and the individual is at the center of interest. If the index is lower, the society is more communitarian with "a very tight social fabric".

Culture in a coopetition: cooperation vs. competition: The culture of the actors impacts strategic decisions within companies or an economic environment. By promoting collaboration and competition simultaneously, this culture influences behaviors and the way in which actors formulate their strategy. It encourages a more flexible and adaptable approach, allowing companies to adapt to dynamic changes in their environment. Furthermore, culture fosters innovation and creativity by creating a balance between cooperation and competition. This can lead to more innovative and differentiated strategies in a market including competitive coopetition, cooperative coopetition and balanced coopetition (Indjendje Ndala, 2024a). Cultural similarities between two rival partners make them suitable to join an alliance for the innovation of joint products (Samanta & al., 2020). Cultural similarity leads to transparent cooperation (Jakobsen, 2020). On the other hand, cultural mismatch leads to inefficient competition (Efrat & al., 2022). Cultural constraints are determinants of coopetition strategies (Castro Gonçalves & Guimarães, 2020). The cultural dimension of organizational proximity (Klimas, 2016) is an antecedent of coopetition (Czakon & al., 2019). Kane & Sall (2013) note that occupational and geographic proximity de facto confer a competitive dimension and that collaboration between competitors is favored by predispositions to collegiality that originate in sociocultural factors. Coopetition is recognized as a culture-dependent phenomenon (Klimas, 2016) and country-sensitive (Czakon & al., 2019).A relationship based on, among other things, trust, reciprocal exchanges, cultural similarity can improve coordination and minimize opportunism (Czakon et al., 2020), and requires time to develop longterm-oriented coopetition strategies (Czakon & Czernek, 2016). Knein et al. (2020) argue that coopetition strongly depends on the willingness of organizational members to compete or cooperate. Furthermore, they explain how individualism is a critical cultural contingency by emphasizing the degree to which individuals take care of themselves compared to that of their unit, group, or organization (Knein & al. 2020). Indjendje Ndala (2024a) finds that the individualism of actors explains their opportunism when they paradoxically trust each other in competitive coopetition without sanction. On the other hand, national and transnational communitarianism explains opportunistic behavior in competitive coopetition (Indjendje Ndala, 2024a).

Research design: Our analytical framework in Figure 1 attempts to show the effects of culture on the two components of coopetition, cooperation and competition. Indeed, we first study the associations of variables from field data, in an exploratory approach, the factorial analysis of correspondences, then we study the moderating or mediating effects of culture on the two components of coopetition, in a confirmatory approach.



Source : Author 2024.

Figure 1. Design of the effect of culture on the structure of coopetition

METHODOLOGY

* *

We present the methodological approach, the research data and the technique of their processing

Methodological approach: We mobilize a two-part quantitative methodology, an exploratory approach, using factorial analysis of correspondences to link items of the type of coopetition (cooperative coopetition, competitive coopetition and balanced coopetition) and the items of the culture of the actors (West Africa, Central Africa except Gabonese and Gabonese nationals); and a confirmatory approach which analyzes the moderating or mediating effects of culture on coopetition and its components.

Research data: The data are collected by a questionnaire administered to 656 actors in a coopetitive market in the alternative transport sector. The informants were questioned about their nationality, the type of strategy practiced on the market.

In addition, the perception of informants in coopetition gives: 250 actors believe that cooperation dominates competition, 270 actors believe that competition dominates cooperation and 136 actors believe that cooperation and competition are equal.

Data processing technique: We used two data processing techniques, namely the factorial analysis of correspondences with the Statistica software and the moderation test technique carried out using the PROCESS 4.3 software by Hayes (2022) which is a calculation tool available for SPSS and the mediation test technique with dichotomous variables which is carried out using the protocol of Rijnhart & al. (2023).

RESULTS

We present the exploratory results, the results of the moderation and mediation tests and then the theoretical modeling of the results.

Table 1. Operationalization of variables				
Modalities	Values			

Variables	Modalities	values	
	Nation-Ind	=1 if the actor is Gabonese	=0 if not
CULTURE	TransNation-Ind	=1 if the actor is a national of Central Africa except Gabonese	=0 if not
	TransNation-Com	=1 if the actor is a West African national	=0 if not
	Coop-Cooperativ	=1 if the actor believes that cooperation dominates competition	=0 if not
COOPETITION	Coop-Equilibre	=1 if the actor considers that cooperation and competition are equal	=0 if not
	Coop-Concurrent	=1 if the actor believes that competition dominates cooperation	=0 if not

Source : Author 2024.

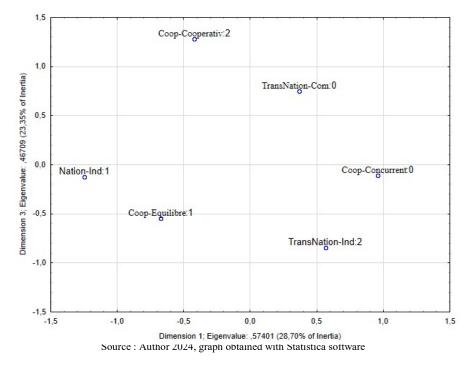


Figure 2. Factorial analysis of Culture-Structure correspondences of coopetition

The variables used in this research are the "Nationality" coded "CULTURE" is ternary whose modalities are "Nation-Ind", "TransNation-Ind" and "TransNation-Com", the variable "Strategy" coded "COOPETITION" is ternary whose modalities are "Coop-Equilibrium", "Coop-Cooperativ" and "Coop-Concurrent". The operationalization of the modalities of the variables is binary, that is to say if the modality is encountered, it takes the value 1 if not it takes the value 0. We note that the informants are composed of 269 nationals (Gabonese), 175 nationals of Central Africa except the Gabonese and 212 nationals of West Africa. We use the result of Hofstede (1991) on the individualistic or communitarian dimension by country, summarized by the map in Appendix 3. Indeed, it indicates that the countries of Central Africa are more individualistic and the countries of West Africa are communitarian.

Exploratory results: The exploratory results of the factorial analysis of correspondences indicate that the cultural nationals of West Africa who are more communitarian favor cooperative coopetition, the cultural nationals of Central Africa who are more individualistic except the Gabonese, favor balanced coopetition, finally, the nationals (Gabonese) favor balanced coopetition.

- R1 "an individualistic national culture influences balanced coopetition."
- R2 "an individualistic transnational culture of actors influences competitive coopetition."
- R3 "a communitarian transnational culture of actors influences cooperative coopetition."

From the three previous exploratory results, we note that whatever the transnational or national culture, whether individualistic or communitarian, culture influences coopetition via its components, from which we deduce R4 "culture has effects on the structure of coopetition." We will specify the nature of these effects of culture on coopetition in a confirmatory approach to the moderation and mediation tests.

Results of moderation and mediation tests: We move on to the confirmatory approach of the tests to study the moderating or mediating effects of culture on the components of coopetition. According to Table 2, we carry out 18 mediation and moderation tests by combining the 3 modalities of the culture variable, individualistic culture, communitarian culture and national culture, with the 3 modalities of the strategy variable, competition, cooperation and competition/cooperation. Therefore 9 moderation tests summarized in Appendix 1 and of the mediation tests in Appendix 2, indicate that only three moderation tests out of nine and two mediation tests out of nine are conclusive and significant because their p-value is less than 10%.

The first result indicates that an individualistic transnational culture of actors has a negative moderating effect on the competition/ cooperation balance. This means that the more individualistic the transnational actors in a coopetition are, the more the balance between competition and cooperation is ensured in the coopetition. So we deduce the following hypothesis, H1 "an individualistic transnational culture of actors has a negative moderating effect on balanced coopetition." The second result indicates that an individualistic transnational culture of actors has a negative moderating effect on competition. This means that the more individualistic the transnational actors in a coopetition are, the more competitive the coopetition is. So we deduce hypothesis H2 "an individualistic transnational culture of actors has a negative moderating effect on competitive coopetition." The third result indicates that an individualistic national culture of actors has a positive moderating effect on competition. This means that the more individualistic the national actors are, the more competitive coopetition is attenuated. Therefore, we deduce hypothesis H3: "an individualistic national culture of actors has a positive moderating effect on competitive coopetition."

Table 2. Different possible tests of moderation and mediation

Cultures	Moderation	Competition	Moderation on Mediation on		Moderation	Mediation on	
	on cooperation	Mediation	competition cooperation		Cooperation=	Competition =	
					Competition	Cooperation	
Individualistic National Culture	Competitive Coopetition		Cooperative Coopetition		Balanced Coopetition	Balanced Coopetition	
Individualist Transnational Culture	Competitive Coopetition		Cooperative Coopetition		Balanced Coopetition	Balanced Coopetition	
Transnational Communitarian	Competitive Coopetition		Cooperative Coopetition		Balanced Coopetition	Balanced Coopetition	
Culture	-	-	-	-	*	*	
Source : Author 2024.							

Example of moderation (other treatments are in appendix 1)

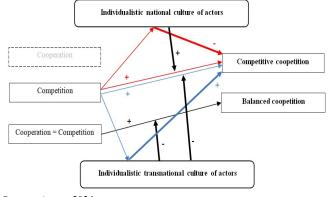
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OUTCOME VARIABLE	: COOPETITIO	N					
Model Summary	R	R-sq	MSE	F	df1	df2	q
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Model						,	
coeff	se	t	q	LLCI	ULCI		
constant	,8278	,0172	48,0705	,0000	,7940	,8616	
COOPETITION1	,4788	,0426	34,7340	,0000	1,3952	1,5624	
TransNation-Ind	,1437	,0390	3,6860	,0002	,0671	,2202	
Int 1	-,1813	,0930	-1,9493	,0517			
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21.2 Dilli.							

Example of mediation (the other treatment is in appendix 2)									
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de confiance à 95,0% pour B	Corréla	ations							
B Erreur	standard	Bêta			Borne	inférie	ure	Borne	supérieure
Corrélation simple									
1 (Constante) ,705									
Coop-Concurrent ,295 ,058		,000	,181	,410	,195	,195	,195		
a Variable dépendante : COOPE	TITION								
Coefficientsa									
Modèle Coefficients r			Coeffi	icients	standard	lisés	t	Sig.	Intervalle
de confiance à 95,0% pour B									
	standard				Borne	inférie	ure	Borne	supérieure
Corrélation simple									
1 (Constante) ,228	,022	10,168	,000	,184	, 272				
Coop-Concurrent ,094		2,697	,007	,026	,163	,105	,105	,105	
a Variable dépendante : TransNation-Com									
Coefficientsa									
Modèle Coefficients r			Coeffi	icients	standard	disés	t	Sig.	Intervalle
de confiance à 95,0% pour B									
	standard				Borne	inférie	ure	Borne	supérieure
Corrélation simple									
1 (Constante) ,665									
Coop-Concurrent,279,058						,184			
TransNation-Com ,173	· ·	2,672	,008	,046	,301	,122	,104	,102	
a Variable dépendante : COOPE	TITION								

The fourth result indicates that an individualistic national culture of actors has a negative mediating effect on competitive coopetition. The individualistic national culture variable has a suppression effect. A suppression effect is present when the direct and mediated effects of an independent variable on a dependent variable have opposite signs (MacKinnon & al., 2000). This is an inconsistent mediation according to Davis (1985). This means that the more individualistic the national actors are, the less competitive coopetition is. Therefore, we deduce hypothesis H4: "an individualistic national culture of actors has a negative mediating effect on competitive coopetition." »

The fifth result indicates that an individualistic transnational culture of actors has a confounding effect (not a mediating effect) on competitive coopetition because the addition of the confounding variable individualistic transnational culture "TransNation-Ind" to the regression equation reduces the association between the independent variable competition "coop-competitor" and the dependent variable coopetition "COOPETITION" (MacKinnon *et al.*, 2000). This is a confounding effect. A confounding variable is a variable related to two factors of interest that obscures or wrongly accentuates the relationship between them (Meinert, 1986, p. 285). That is, the more individualistic transnational actors are, the more competitive the coopetition is. Therefore, we deduce hypothesis H5 "an individualistic transnational culture of actors has a positive mediating effect on competitive coopetition."

Theoretical modeling of the results



Source : Auteur 2024.

Figure 3. Effects of the individualistic culture of national and transnational actors on coopetition

DISCUSSIONS & RESEARCH CONTRIBUTIONS

Our discursive approach compares the exploratory results with those from the tests. Indeed, we compare:

- R1 and H1, an individualistic national culture influences balanced coopetition on the one hand, and the individualistic transnational culture exacerbates the balance of the coopetitive structure on the other hand. This result indicates that the change of geographical scale from local to global, reinforces balanced coopetition or the balance between cooperation and competition. This result is explained by the assertion of Luo (2007) in an international context, who conclude that "Finding limits to cooperation and competition is an essential first step because it determines the subsequent structure of coopetition. In addition, it is important to maintain a "strategic balance" in coopetition. Strategic balance refers to the organizational structuring of the appropriate proportions of cooperation and competition to satisfactorily achieve the global objectives of the company. » It is also explained by the intermediation of third-party actors who balance coopetition to reduce the opportunism of actors (Indjendje Ndala, 2024b).

- R2 and H2, H5, an individualistic transnational culture of actors influences competitive coopetition and an individualistic transnational culture of actors has a negative moderating effect on competitive coopetition or H5 "an individualistic transnational culture of actors has a positive mediating effect on competitive coopetition." From this comparison we retain that the individualistic transnational culture of actors exacerbates competition in coopetition. Internationally or at a global geographical level, coopetition tends to be more competitive. This result is explained by the business proximity and the geographical proximity of actors, in the vein of Kane & Sall (2013) because these proximities reinforce competition. This result can be explained by an increase in competitive pressure valid for companies that focus on the domestic market and face competition from foreign companies (Gaffard & al., 2009).

- H3 and H4, an individualistic national culture of the actors has a positive moderating effect and a negative mediating effect on competitive coopetition. Therefore, the individualistic national culture moderates competition in coopetition. This result can be explained by individualistic nationals who display a sense of hospitality, friendship, otherness and openness towards their competitors who are not nationals. It can also be explained by the tightness of the barrier to

market entry by the collusion of nationals or the porosity of the barrier to entry (Indjendje Ndala, 2024c). Finally, from a purely economic point of view, our result is explained by imperfect market integration, i.e. when there are still factors of international market segmentation after integration, where there is a persistence of arbitrage costs for consumers or the existence of national demands for customization (Gaussens *et al.*, 2011, p. 498). Consumer arbitrage between national markets prevents reciprocal dumping and encourages companies to refocus on their domestic market, as competition is reduced due to the decline in foreign supply on the market (Gaussens *et al.*, 2011, p. 498).

CONCLUSION

At the end of this research which attempted to answer the question "what is the influence of the culture of the coopetitors on the structure of coopetition between VSEs?" we retained the dimensions of individualism and communitarianism of culture according to Hofstede and Trompenaars & Hampden-Turner. We adopted a two-part quantitative methodology, the first is exploratory using factorial correspondence analysis and the second concerns moderation and mediation tests. The data come from a questionnaire administered to 656 coopetitors (VSEs) in the alternative transport sector. The results indicate that the national and transnational individualist culture of the coopetitors significantly influence the dynamics of coopetition. More precisely, we answer the research question that the national individualist and transnational individualist cultures of the actors exacerbate balanced coopetition. The transnational individualist culture of the actors exacerbates competitive coopetition. In addition, the individualistic national culture of the actors moderates competitive coopetition. The contributions of this research are theoretical and managerial. The theoretical implications of this research complement the theory of coopetition by integrating the cultural dimension, in particular the individualism and communitarianism of the actors. The introduction of individualistic culture has consequences on the structure of coopetition, in particular, exacerbating balanced coopetition or moderating competitive coopetition if the actors are national and, exacerbating competitive coopetition, if the actors are transnational.

The managerial implications for company managers concern better management of resources and capacities, in a more balanced approach to cooperation and competition, to obtain the best benefits. Managers and strategy practitioners must take into account the culture of the coopetitors to properly define their strategy in a context of coopetition. They must understand coopetition from a dynamic point of view. Practically, they must adapt their strategic approaches according to the culture of the actors. If the market is mainly composed of actors with an individualistic national culture, then managers should seek to balance cooperation and competition (balanced coopetition) or moderate the competitive component of coopetition to get the most out of their strategy. However, a market composed of a majority of transnational actors with an individualistic culture, then managers should favor coopetition with a competitive propensity. The application of these strategies by managers must be dynamic and proactive to improve decisions. These implications have a positive impact on the performance and sustainability of companies involved in coopetitive dynamics. Therefore, the individualistic culture influences the strategic decisions of companies or actors by encouraging collaboration and/or competition in different doses. These companies that integrate the culture of individualistic or communitarian actors are able to adapt more easily to ambivalent environments. The main limitation of this research is the use of a single field and a single sector. Thus, the exploratory result R3 "a transnational communitarian culture of the actors influences cooperative coopetition." did not obtain conclusive and significant mediation or moderation tests, which suggests interesting research perspectives in other fields and contexts. Other future research can study the influences of the dimensions of Hofstede's culture, in particular power distance and uncertainty avoidance on the dynamics of coopetition in business in several sectors of activity. It would also be interesting to explore the impact of the culture of the coopetitors on the financial performance of companies in several sectors.

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