

# Transformational Leadership Fostering Open Innovation: A Dynamic Capabilities Perspective

Elona Cera<sup>1</sup> and Zuhair Abbas<sup>2</sup>

<sup>1</sup>Management and Marketing Department, Faculty of Management and Economics, Tomas Bata University in Zlin, Czech Republic

<sup>2</sup>Business Administration Department, Faculty of Management and Economics, Tomas Bata University in Zlin, Czech Republic

[e1cera@utb.cz](mailto:e1cera@utb.cz) (Corresponding author)

[abbas@utb.cz](mailto:abbas@utb.cz)

**Abstract:** Drawing upon dynamic capability theory, this research examines the role of transformational leadership in fostering open innovation in an emerging economy context in Southeastern Europe. Foremost, the study endeavours to tackle a noteworthy limitation, namely the nascent state of open innovation in the current body of literature pertaining to small and medium-sized enterprises (SMEs). Using a quantitative survey, we gathered information from 154 Albanian SMEs respondents. Data was analysed using PLS-SEM on the SmartPLS 4.0 version. The results show transformational leadership has a significant relationship with developmental culture and open innovation. In addition, we found that developmental culture mediates the relation between transformational leadership and open innovation. This research provides important practical implications for policymakers, leaders and industry practitioners to develop new business models for innovation diffusion. It requires shifting the focus from traditional innovation approaches towards new solutions to ensure collaboration and knowledge exchange. Existing researchers have highlighted transformational leadership with open innovation in the Western context. However, open innovation is less explored in Southeastern Europe specifically in SMEs which is an important context to unravel the useful insights. Significantly, open innovation became enabler of value creation, improved competitiveness and economic growth.

**Keywords:** Transformational leadership, Developmental culture, Open innovation, SMEs, Developing economy

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## 1. Introduction

The concept of open innovation has emerged as a compelling area of interest within the field of innovation management science (Elmqvist, Fredberg and Ollila, 2009). According to researchers (Chesbrough, 2010; Chesbrough and Bogers, 2014), innovation refers to the exchange of knowledge both internally and externally to enhance the competitiveness of a business. In the current business landscape, numerous organizations are required to adjust to the constantly evolving and dynamic external factors that deviate significantly from conventional methods of innovation (Dahlander and Gann, 2010). Therefore, successful transition from one innovation approach to another necessitates effective leadership that is receptive to an open innovation paradigm (Naqshbandi and Tabche, 2018; Naqshbandi, Tabche and Choudhary, 2019). Studies conducted in small and medium-sized enterprises (SMEs) have received limited attention, in contrast to the extensive research conducted in large multinational corporations (Usman et al., 2018). While smaller firms may not be as actively involved in open innovation (OI) as larger corporations, it is important to recognize their participation in external information acquisition (Spithoven, Vanhaverbeke and Roijackers, 2013; Tsai *et al.*, 2022; Carrasco-Carvajal, Castillo-Vergara and García-Pérez-de-Lema, 2023). Thus, the significance of innovation in SMEs cannot be overstated, as it is critical to their growth. Consequently, the leadership of SMEs plays a vital role in ensuring their sustainability (Gad David *et al.*, 2021).

Different authors have paid attention to the influence of leadership in open innovation: such as empowering leadership (Naqshbandi and Tabche, 2018); transformational leadership (Gad David *et al.*, 2021) or knowledge oriented leadership (Naqshbandi and Jasimuddin, 2018). However, despite the well-established role of leadership in open innovation, research about SMEs operating in Southeastern Europe, in developing countries such as Albania, is scarce. Consequently, knowledge about the importance of leadership that influences open innovation in Albanian SMEs is largely unexplored. Chronologically considering the evolution of the term transformational leadership (TL), it has been variously described as a style of leadership that transcends traditional transactional leadership (Burns, 1978) as the process through which leaders inspire and motivate people through intellectual stimulation, personalized consideration, and idealized influence (Avolio, Waldman and Yammarino, 1991; Bass and Avolio, 1993) as a leadership form defined by a leader's capacity to inspire and motivate people by appealing to their higher-order needs and ideals (Yukl, 1999) and ultimately, as a behavioral model for leaders that encourage and inspire people to achieve exceptional performance through connecting with their underlying beliefs and values (Bass and Riggio, 2006). Accordingly, leaders defined as

transformational, as opposed to those defined as transactional, pay much more attention to the needs of their followers (Burns, 1978; Yukl, 1999; Bass and Riggio, 2006; Gad David *et al.*, 2021) to what motivates and inspires them towards appropriate action (Avolio, Waldman and Yammarino, 1991; Yukl, 1999) overlooking their personal goals in favor of collective values and attitudes shared in the framework of a “common agency” (Burns, 1978; Bass and Riggio, 2006; Gad David *et al.*, 2021), the expectations of which, followers are inclined to exceed (Burns, 1978). Intuitively, transformational leaders are expected to raise their followers' awareness, inspire new thinking, and foster personal growth and development (Yukl, 1999). Beginning with these considerations, the purpose of this study is to investigate the connection between a transformational leadership style and open innovation in SMEs that are operating in Albania.

Prior studies have examined the mediating mechanisms that explain the relationship between leadership and open innovation (Naqshbandi and Jasimuddin, 2018; Naqshbandi and Tabche, 2018; Gad David *et al.*, 2021). In this regard, Gad David *et al.*, (2021) stressed that conventional leadership not only promotes open innovation but also empowers an innovative culture, which when combined with the proper leadership, leads to open innovation. Notwithstanding their findings, the authors encourage forthcoming scholars to examine different aspects of innovative culture within the context of open innovation. Hence, we suggest that the developmental culture plays a mediating function in the association between transformational leadership and open innovation within small and medium-sized enterprises (SMEs). The culture in question is primarily oriented towards the external environment, with a particular emphasis on aspects such as “growth, resource acquisition, creativity, and adaptation” (Lau and Ngo, 1996). Therefore, it is contended that leaders bear the responsibility of promoting open innovation in SMEs through the cultivation of an appropriate culture and establishment of structures that facilitate the adoption of change and the augmentation of innovation acquisitions.

In a nutshell, the aim of this research is to enhance the understanding of the human aspect of open innovation by providing empirical evidence on the interconnections between transformational leadership, developmental culture, and open innovation in SMEs operating in Albania. Ongoing research endeavours to expand the existing body of knowledge in the domains of leadership, organizational culture, and open innovation within the context of SMEs functioning in a dynamic economic landscape. Comprehending these phenomena can aid SMEs in the selection and promotion of suitable leadership to attain their growth objectives, foster competitiveness, and ensure long-term sustainability.

## **2. Literature Review**

Teece *et al.*, (1997) define dynamic capability as “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments.” Dynamic capability is recognized as a source of competitive advantage (Teece, Pisano and Shuen, 1997) in a dynamic and changing environment. Scholars Teece *et al.*, (1997) with the term “dynamic” refer to an organization's ability to update knowledge in order to adapt to the current business environment, which requires innovative approaches. The term “capabilities” emphasizes strategic management's crucial function in adequately adapting, absorbing, and reconfiguring resources to fulfill the demands of a changing environment. Thus, they emphasize that this is the best approach to match the needs of businesses concerning technological changes with a market orientation. Dynamic capabilities theory derives from the resource-based view theory. According to Bierly and Chakrabarti, (1996), the resource-based view emphasizes the importance of internal resources (i.e., human resource or leadership) and how they are used to generate different outcomes. Therefore, transformational leadership is widely acknowledged for its distinctive attributes, including “charisma, inspiration, and intellectual stimulation” (Nemanich and Vera, 2009). As a result, it is highly favored in dynamic environments that prioritize the advancement of both explorative and exploitative learning (i.e., open innovation) (Nemanich and Vera, 2009; Wamalwa, 2022).

Regarding the existing literature, leadership influences organizational culture (Naqshbandi, Tabche and Choudhary, 2019) and concomitantly enhances knowledge absorption and utilization determinants, thus fostering open innovation (Naqshbandi and Jasimuddin, 2018; Naqshbandi, Tabche and Choudhary, 2019). It is natural to assume that such a developmental culture also possesses the potential to foment open innovation. According to Naqshbandi *et al.*, (2015) collaborative organizational cultures, typified by cooperation, teamwork, and knowledge sharing across hierarchical boundaries, positively promote the implementation of open innovation. Companies with a collaborative culture are more likely to engage in external partnerships, actively seek external knowledge and ideas, and are more open to external influences, making open innovation

desirable and possible. Collaborative cultures have been variously described as developmental as well (Tuurnas *et al.*, 2019).

It contrasts other types of cultures, such as control-oriented cultures and adhocratic ones (Naqshbandi and Kamel, 2017; Naqshbandi, Tabche and Choudhary, 2019). E.g., control-oriented organizational cultures, defined by stringent hierarchies, inflexible procedures, and centralized decision-making, obstruct open innovation (Naqshbandi *et al.*, 2018). On the other hand, adhocratic cultures have a moderately beneficial impact on open innovation methods since they are characterized by flexibility, risk-taking, and entrepreneurial focus (Naqshbandi and Jasimuddin, 2018).

Companies with an adhocratic culture are more eager to experiment, explore new prospects, and engage in external collaborations, but their focus on innovation may be limited to certain projects or teams rather than being embraced throughout the firm. Nevertheless, as it has been reported that developmental cultures with a focus in external environment (Lau and Ngo, 1996) are the most conducive to innovation (C.-M. Lau and Ngo, 2004), we hypothesize that:

*H1 – Developmental culture positively influence open innovation*

In spite of definitional modifications dictated by the period in which transformational leadership has been described (Sarros, Cooper and Santora, 2008) some common patterns and themes emerge among definitions throughout the decades and are cross-shared by many authors. Thus, for the purpose of this study, our understanding is that transformational leaders establish a vision, set high standards, and offer support and encouragement to followers in order to help them reach their full potential. Notwithstanding, a definition of transformational leadership is incomplete if not adequately linked to its relationship with other components of organizational agency and structure (Yukl, 1999; Sarros, Cooper and Santora, 2008). According to numerous scholars, it is generally understood that, irrespective of causality (Bass & Riggio, 2006; Burns, 1978), there is a strong correlation between leadership style (LS) and organizational culture (OC) (Lok and Crawford, 2004; Bass and Riggio, 2006; Bowers, Hall and Srinivasan, 2017). Some of these scholars have explored OC's role in imposing a specific LS; whereas, concurrently, others have found that LS, especially in early-stage structures which are considerably more prone to developing OCs that resemble their first leaders' LSs and set of values (in similar fashion to the "founder effect" in biology), plays a major role in modelling OC (Bass and Avolio, 1993; Bass and Riggio, 2006; Schein, 2010; Metwally *et al.*, 2019). Another relevant facet explored by some researchers (Bass and Riggio, 2006; Metwally *et al.*, 2019; Gad David *et al.*, 2021) relates to the type of OC that is more inductive of a particular style of leadership. Drago-Severson and Blum-DeStefano, (2018) have found that cultures framed as developmental (DCs) are more conducive of transformational leadership styles. Moreover, Carmeli *et al.*, (2010) discovered that transformative leadership is positively associated to a culture of innovation and creativity, i.e., a developmental culture. This generates a culture that supports innovation, welcomes new ideas, and encourages lifelong learning (Bass and Riggio, 2006; Drago-Severson and Blum-DeStefano, 2018). According to Eisenbeiss *et al.*, (2008), through the above-mentioned mechanisms, transformational leaders cultivate deep bonds with their followers, promote open lines of communication, and involve staff in decision-making processes, which fosters a psychologically comfortable environment and stimulates knowledge sharing, teamwork, and cooperation. Pertaining to the above, the following hypothesis has been formulated:

*H2 – Transformational leadership influence developmental culture*

Multiple authors (C.-M. Lau and Ngo, 2004; Naqshbandi and Jasimuddin, 2018) have found the aforementioned set of properties to be not only descriptive of developmental cultures (Eisenbeiss, Van Knippenberg and Boerner, 2008), but also for such a culture to be indicative of open innovation (OI) (Naqshbandi, Kaur and Ma, 2015; Scaliza *et al.*, 2022). Therefore, a developmental culture encourages organizations to utilize mechanisms that are prolific of OI, such as knowledge exchange, knowledge management capacities, as well as knowledge-oriented leadership (Lau and Ngo, 2004). Moreover, within this "OI-enabled triad" (Naqshbandi, Kaur and Ma, 2015; Naqshbandi and Jasimuddin, 2018; Scaliza *et al.*, 2022) there are intricate interrelations which would require a separate paper to further investigate. What is relevant in our case is that knowledge-oriented leadership improves knowledge management capability. According to the above-cited research, leaders that prioritize knowledge acquisition, sharing, and utilization, create an environment conducive to knowledge management within their organizational structures. These leaders facilitate information exchange and give resources and assistance for knowledge-related initiatives. They are otherwise instrumental in directing transformational processes in organizations (Naqshbandi and Jasimuddin, 2018).

Additionally, knowledge management capability has a beneficial impact on open innovation (Eisenbeiss, Van Knippenberg and Boerner, 2008; Naqshbandi and Jasimuddin, 2018; Naqshbandi, Tabche and Choudhary, 2019; Scaliza *et al.*, 2022). Accordingly, several studies (Naqshbandi and Jasimuddin, 2018; Scaliza *et al.*, 2022) have found that organizations with improved knowledge management capability are more likely to engage in open innovation practices. Effective leadership practices help to build a strong knowledge management competence, which aids in the adoption of open innovation ideas and practices.

Therefore, the following hypothesis has been proposed:

*H3 – Transformational leadership influence open innovation*

Concerning existing studies it is compelling to affirm that transformational leadership has been shown to build a developmental culture within firms by inspiring and motivating followers to realize their maximum potential (Gad David *et al.*, 2021). Transformational leaders create an appealing vision, foster trust and cooperation, and empower their followers, nurturing an environment conducive to learning, creativity, and continuous development (Bass and Riggio, 2006; Bowers, Hall and Srinivasan, 2017; Naqshbandi, Tabche and Choudhary, 2019; Gad David *et al.*, 2021) Previous research has found that a developmental culture is connected with open innovation. It promotes information exchange, collaboration, and the use of outside knowledge sources (Naqshbandi and Jasimuddin, 2018; Naqshbandi, Tabche and Choudhary, 2019). Organizations with a collaborative and developing culture are more likely to engage in open innovation techniques such external partnerships, seeking external knowledge and ideas, and being open to outside influences (Lau and Ngo, 2004; Lau and Ngo, 1996). Based on these findings, it is possible to hypothesize that a developmental culture serves as a bridge between transformational leadership and open innovation. In other words, the presence of a developmental culture within the firm mediates the favorable influence of transformational leadership on open innovation. Transformational leaders contribute to the development of a culture that promotes innovation practices through their leadership behaviors, which in turn helps the execution of open innovation initiatives. Transformational leadership promotes open innovation indirectly through its impact on company culture. Transformational leaders promote a developmental culture to foster innovation, knowledge sharing, and cooperation, which eventually improves the organization's ability to engage in innovation activities (Lau and Ngo, 2004). Henceforth, our final hypothesis assumes that:

*H4 – Developmental culture mediates the relation between transformational leadership and open innovation*

### **3. Methodology**

#### **3.1 Data and Sample**

The current investigation utilized a quantitative methodology due to its capacity to deduce the traits, beliefs, and/or actions of a populace from a restricted sample size (Creswell and Creswell, 2017). The present study employs a methodology based on surveys to carry out the investigation. According to Saunders, M. *et al.*, (2009), the proposed research approach entails conducting comprehensive quantitative research and analyzing the interrelationships among various variables within a specific research framework. The study encompassed a cohort of 154 participants hailing from both the service and manufacturing industries. The minimum requirement specified by Bagozzi and Yi, (2012) was satisfied by the sample size in question. Current research employs data at the level of the firm to examine the correlation among different constructs. The study necessitates the inclusion of participants who hold the designation of owner or manager to ensure their possession of a comprehensive understanding of the organization's circumstances, as per the methodologies employed in prior research (Popa, Soto-Acosta and Martinez-Conesa, 2017). With regards to the demographic profile of the sample, it was found that 59% of the participants were categorized as owners, whereas the remaining 41% were identified as managers. Additionally, the investigation unveiled that 43% of the respondents were men, whereas 57% were women.

#### **3.2 Variable Measurement**

*Transformational leadership.* We used a 4-items measuring construct for transformational leadership, as adopted by García-Morales *et al.*, (2008)García-Morales, (2008), serving as the independent variable. A sample item is: TL1 - "The organization's management has a clear common view of its final aims and is able to transmit them and achieve the commitment of the rest of the organization's members". *Developmental Culture.* We used a 4-items construct for measuring developmental culture, as adopted by (Lau and Ngo, 2004) serving as the mediating variable. A sample item is "Our firm is a very dynamic and entrepreneurial place". Concerning data analysis, items: DC1 – "Our firm is a very dynamic and entrepreneurial place" and "DC2 - "The head of our

firm is generally considered to be an entrepreneur, an innovator, or a risk-taker” have been removed to increase construct consistency. *Open innovation*. We adapted an 11-item scale to measure the dependent variable derived from the work of Laursen and Salter, (2006). Participants were requested to assess the extent to which the company engaged in knowledge and information acquisition from external sources, including: “1) Consumers; 2) Dealers; 3) Competitors; 4) Consultants; 5) Universities and other research institutions; 6) Technology intermediary organizations; 7) Intellectual property organizations; 8) Venture capital enterprises; 9) Trade associations; 10) Relevant government departments”. However, for the purpose of enhancing construct consistency in the analysis of the data, item OI9 - "News media" was excluded.

#### 4. Results

A difference of roughly 31% was found using the Harman single-factor analysis, removing the risk of a bias caused by using a standard procedure. In addition, VIF values are all less than 3 in Table 1, so collinearity is not a major concern here (Diamantopoulos and Siguaw, 2006).

**Table 1: Measurement Model**

Constructs	Indicator	Factor Loadings	VIF	Rho_A	CR	CA
<b>Transformational Leadership (TL)</b>				0.921	0.940	0.915
	TL1	0.882	2.531			
	TL2	0.897	2.953			
	TL3	0.927	2.557			
	TL4	0.864	2.729			
<b>DC</b>				0.811	0.913	0.808
	DC3	0.922	1.853			
	DC4	0.910	1.855			
<b>Open Innovation (OI)</b>				0.901	0.911	0.894
	OI1	0.694	1.914			
	OI2	0.739	2.385			
	OI4	0.670	1.545			
	OI5	0.675	2.387			
	OI6	0.775	2.519			
	OI7	0.736	2.662			
	OI8	0.791	2.581			
	OI9	0.618	1.906			
	OI10	0.748	2.565			
	OI11	0.663	2.094			
<b>Note: VIF=Variance Inflation Factor, Rho_A=, CR=, CA=</b>						

Source: Authors’ own

As per (Henseler et al., 2015), The ratio of Heterotrait to Monotrait (HTMT) also showed that discriminant validity (HTMT) was true. Table 3 demonstrates that all HTMT ratios were within the 0.85 threshold.

**Table 2: Discriminant Validity Fornell-Larcker Criterion**

	DC	OI	TL
DC	0.916		
OI	0.385	0.713	
TL	0.470	0.422	0.893

Source: Authors’ own

**Table 3: Discriminant Validity Heterotrait-Monotrait ratio (HTMT)**

	<b>DC</b>	<b>OI</b>	<b>TL</b>
<b>DC</b>			
<b>OI</b>	0.423		
<b>TL</b>	0.544	0.431	

Source: Authors' own

The bootstrapping method (5,000 subsamples, one-tailed significance) was used to find out how important the measure was. As Hypothesis H1, DC (O = 0.239, t = 2.261, p = 0.012) was strongly associated with open innovation (OI). Furthermore, results showed that there is a significant connection between transformational leadership and development culture (O=0.470, t=5.823, p=0.000), lending credence to H2. O=0.310, t=2.931, p=0.002 also supports H3 that TL is associated favourably with open innovation.

**Mediation Analysis**

Table 4 shows that an interaction analysis was done to prove hypothesis H4. The results revealed that H4 (developmental culture) moderated the connection between transformational leadership and open innovation (O=0.112, t=1.997, p=0.023). The predictability of research variables was determined by calculating the coefficient of determination (R<sup>2</sup>) of the regression model (see Table.5). This coefficient provides an assessment of the likelihood that an independent variable can account for a certain amount of variance in the value of the dependent variable. Open Innovation (R<sup>2</sup>) as a dependent variable in the model explains just 22% of the overall variation in open innovation, which can be thought about for the effects of separating variables on revolutionary leadership as a whole. However, 22% is shown by the mediation construct in developmental culture (0.221).

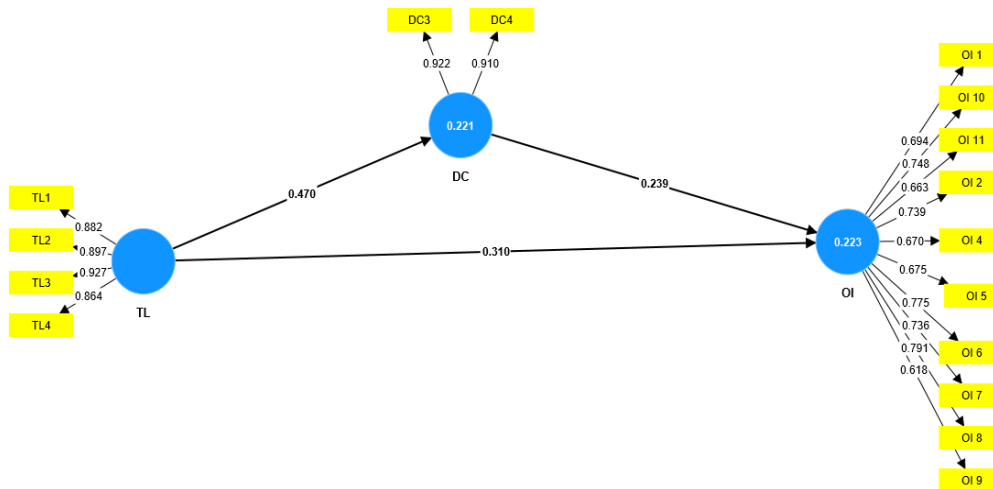
**Table 4: Results of hypotheses testing (direct and indirect effect)**

Relationship	Original Sample (O)	Sample Mean (M)	STDEV	t-value	p-value	Decision
<b>Direct Effect</b>						
H1: DC ---->OI	0.239	0.249	0.106	2.261	0.012	Supported
H2: TL ---->DC	0.470	0.474	0.081	5.823	0.000	Supported
H3: TL ----> OI	0.310	0.317	0.106	2.931	0.002	Supported
<b>Indirect Effect (Mediation Analysis)</b>						
H4: TL --->DC --->OI	0.112	0.119	0.056	1.997	0.023	Supported
Construct	Coefficient of determination (R <sup>2</sup> )		Adjusted R <sup>2</sup>			
DC	0.221		0.215			
OI	0.223		0.210			

**Table 5: Model Fit**

	Saturated Model	Estimated Model
<b>SRMR</b>	0.088	0.088
<b>d_ ULS</b>	1.054	1.054
<b>d_ G</b>	0.439	0.439
<b>Chi_square</b>	322.177	322.177
<b>NFI</b>	0.748	0.748

Source: Authors' own



## 5. Discussions and Implications

In this study, a comprehensive model was tested to analyse the role of transformational leadership in open innovation through the mediating mechanism of developmental culture in SMEs. The first hypothesis of this study predicted a positive association between developmental culture and open innovation (*H1*). The results are similar to other studies that prove the influence of developmental culture in product innovation (Lau & Ngo, 2004) and innovation climate in open innovation (Gad David *et al.*, 2021). This study also shows a positive association between TL and DC (*H2*), TL and OI (*H3*). Hence, SMEs that are led by transformational leaders are able to achieve their innovative strategies that involve the sourcing of knowledge resources from the external market. Overall, this confirms previous research findings that posit the significance of leadership in the context of open innovation outcomes and the acquisition of external knowledge for innovation purposes (Naqshbandi and Jasimuddin, 2018; Naqshbandi, Tabche and Choudhary, 2019). The final outcome of this research suggests that there exists a mediating function of DC in the relationship between TL and OI (*H4*). The findings indicate that the association is mediated by the developmental culture. The present discovery aligns with the anticipated outcome that transformational leaders facilitate a workplace culture that encourages open communication channels and staff participation in decision-making procedures. This approach cultivates a psychologically conducive atmosphere that stimulates knowledge exchange, teamwork, and collaboration among employees.

The present research is aimed at practitioners who are involved in the operations of SMEs and aspire to attain their innovation objectives. The study particularly focuses on developing countries where leadership plays a crucial role in promoting growth and progress. A comprehensive understanding of the function of TL in developmental culture and OI enhancement can equip entrepreneurs with knowledge to ascertain a suitable leadership approach to attain the intended growth and expansion of organizational objectives.

## 6. Conclusions and Future Directions

Drawing from DCT, our research investigated the impact of transformational leadership in open innovation under the mediating effects of developmental culture considering data gathered from a total of 154 SMEs located in Albania. The findings have practical implications as they offer valuable insights to managers and leaders of SMEs in Albania regarding the implementation of growth-oriented strategies through an open innovation approach.

Similar to other research endeavours, the current study has certain limitations that could be addressed in future investigations. The utilization of a cross-sectional design in this study may give rise to the possibility of temporal changes in the fundamental causal relationship. Furthermore, it is advisable that further investigations strive to augment their sample size to ameliorate the calibre of their data outputs and amplify the applicability of their findings. In addition, it is possible to contemplate alternative forms of leadership, such as relational leadership, and explore its potential impact on open innovation.

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