Examining Mediating Role of the Development of Principles' Leadership on the Performance of Higher Educational Institutions: A Quantitative Approach

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Abstract

Leadership development is a vital topic of study that has been examined by researchers from all over the world. However, most of these studies are done in Western culture, leaving a large educational gap. Thus, this study seeks to explore the role of leadership development in promoting beneficial educational outcomes. A conceptual model based on leadership theories and research was created. A systematic questionnaire was created and delivered to the 36 participating schools. With a response rate of 36.5%, this survey got 365 responses from various schools. Leadership development was tested using the Sobel test. The most significant variables for leadership de elopement are Agapao love, competitive strategy, and country culture. Leadership development has a strong mediating influence on institutional success. Similarly, institutional culture loses its theoretical and practical value. This study is one of the few to examine the impact of leadership development on institutional outcomes. The findings show that schools must rethink their methods and leadership styles to be compatible with the 21st century.

Key Words: Leadership development, institutional performance, competitive strategy.

Introduction

The professional development of competent school administrators and leaders has received increased attention over the last decade. The following are common results from worldwide studies on effective principle development programmes: (a) Principals require pre-service and ongoing development to fulfil their management and instructional leadership responsibilities; (b) Effective principal programmes are aligned with principal competency standards and focus on the development of school-level practises (e.g. cultivating a shared vision, leading instructional improvement, building organisational capacity, and managing change); and (c) principal responsibilities. There are several methods to developing school leadership. The evidence suggests that effective programmes offer a variety of opportunities for practice-based learning, including problem-based learning, action research, field-based projects, journal writing, portfolios based on feedback and ongoing self, peer, and family assessment, and activities for skill development (C. O. Longenecker & Insch, 2019; Maheshwari & Yadav, 2018; Reams et al., 2020; Sharp & Marchetti, 2020).

Principals' leadership roles have a significant impact on their performance effectiveness. Principals are now perceived differently than they were in the past based on their job. They help the business achieve its mission by guiding workers with strong communication and interpersonal skills. Principals' leadership roles have been proven to be extremely important in increasing institutions' success (Dalakoura, 2010; Hayward, 2011; Tripathi et al., 2020a). They are not only responsible for teaching team members the necessary skills, but also for setting team goals and inspiring them to achieve them. Principals provide as a source of information and motivation for team members to practise and enhance their talents independently. They advance collective efforts by exerting effective influence on behaviour in order to advance toward the attainment of a common aim. A principle establishes a vision, establishes goals, develops a strong team of instructors, promotes skill development and continual learning, and inspires via example and good communication. Principals' leadership abilities impact their employees (Dennis & Bocarnea, 2005; Khattak & O'Connor, 2021; C. Longenecker & Insch, 2018; Nash, 2019; Simkins et al., 2003). Although research on school leadership development programmes is less available and accessible in underdeveloped countries, it focuses more on general preparation for school leadership than on programme performance. The research discusses how principals receive training and development in a variety of ways, including indirect preparation through previous leadership roles, participation in in-service training courses, and attendance at conferences, as well as personal initiative on the part of individual principals. In many poor countries (for example, Kenya, Uganda, Ghana, and South Africa), there are no system-wide resources or money for main initial preparation, and in-service courses and programmes are scarce and of variable quality. As a result, the majority of their preparation occurs in an informal, practical manner within the job. These appear to be the situation for secondary school principals as well, as school leader preparation is disorganised and the majority are unprepared for the position (Cai et al., 2021; Khan et al., 2020; Khan, Mubarik, Islam, et al., 2021; Maheshwari & Yadav, 2019; Mcquade et al., 2021).

The literature on school administrators and leaders, particularly in developing world contexts, is largely concerned with school principals. Numerous studies across North America and Northern Europe demonstrate that school principals frequently collaborate with other formal and informal leaders (assistant principals, teachers in leadership roles) to accomplish school leadership tasks through various forms of shared and distributed leadership. In developing world contexts, research on school management leadership practise has not examined the practise and potential for shared and dispersed school leadership to fulfil school goals. The literature suggests that leadership models and styles have a common set of abilities and talents across countries (Turner et al., 2018, 2019; Turner & Baker, 2018). This might be because academics throughout the world are employing the same models of leadership (instructional, transformational, and dispersed) based on international data, without adding aspects relevant to the local situation. Certain academics in underdeveloped nations express caution regarding the premise of generally applicable leadership styles and the presence of generic skills. Future study may add to theory, policy, and practise by delving further into effective leadership beliefs and behaviours that are contextually responsive (Hickman & Akdere, 2018; Leadership & Leadership, 2020; Schedlitzki, 2019; Wu & Crocco, 2019). In developing countries, research on school principals and their work typically focuses on issues such as their limited authority, autocratic leadership styles, the principal's influence on teacher evaluation, a low degree of change initiation, and a lack of management or instructional leadership functions and capacity. Few studies examine the factors that impede or prohibit school leaders from implementing more effective practises on their own or in response to principal training programmes. As previously stated, there is

a dearth of systematic research regarding the characteristics, functions, behaviours, and relative efficiency of local educational authorities in leading and assisting school reform in developing nations ((Brian) Joo et al., 2020; David & Abukari, 2020; Hayward, 2011; Hirudayaraj & Sparkman, 2019; Huber, 2013; McGurk, 2010; Simkins et al., 2003). In terms of school leader development and training, the literature paints a picture of effective programmes that offer a diverse array of learning opportunities, but there is still much ambiguity regarding the most effective models. Additionally, there is no consensus about the best method for assessing the effect of various leadership development programmes on principals' attitudes and behaviours, and hence on the quality of teaching and learning in schools.

The literature appears to agree that good leadership is a critical component in school improvement. Nonetheless, the majority of study on school leadership has occurred in Western industrialised nations. How far do the statements and models of school leadership created there apply to emerging global communities and cultures? How do headteachers manage change and bring about "improvement" in the later contexts? What could findings from research conducted mostly in the industrialised West imply about how we conceptualise and approach headship and the training and professional development of headteachers in diverse cultures throughout the world? This essay will attempt to address many of these issues in the context of Pakistani education. It begins by discussing some fundamental concepts of educational leadership and their possible relevance to developing country situations. It then discusses the nature of school leadership in the context of Pakistan's educational system, based on two studies that examined the experiences of a variety of headteachers as they sought to lead and manage change in their respective cultural and organisational contexts. Finally, we seek to get a better understanding of the variables that influence the development of principles-based leadership and its mediation effect on educational institution performance.

Literature Review

What is Teacher Leadership?

In an informal sense, teacher leadership has existed for possibly as far as the education system has been. Extending themselves above and above to help their school community is ingrained in the practise of many teachers. Having this in mind, school systems, politicians, researchers, and professional organisations throughout the country have been investigating methods to codify the idea in order to recognise, facilitate, and benefit from the leadership demonstrated by many teachers in their schools. Teacher leadership, according to (Douglas et al., 2021), is the "ability and willingness to contribute outside one's classroom". (Megheirkouni, 2018) expands on this concept by stating that teacher leadership entails "particular roles and duties that identify and employ the skills of the most successful teachers in the service of student learning, adult learning and cooperation, and school and system development". Teacher leadership may be characterised in a variety of ways, most of which are influenced by the environment in which it exists.

Teacher leadership is justified in part by substantial research demonstrating the tremendous influence that good instruction has on student learning. As (Mejheirkouni, 2020) argues, educational systems must capitalise on this effect by placing the most successful instructors "in front of the largest number of kids or the biggest number of children with the highest learning needs" (p. iii). Teacher leadership possibilities provide teachers with career ladders (ladders, lattices) to maintain a high level of engagement in their work and to expand their influence, particularly in high-needs schools. Teacher leadership opportunities are a particularly effective recruiting and retention strategy, since

they have been proven would double the percentage of teachers who would prefer to work in a low-performing school (Ayeleke et al., 2019; Bradd et al., 2018; Dwyer, 2019; Megheirkouni & Mejheirkouni, 2020). Teacher leaders may also assist their school in a variety of different ways, including mentoring and helping others, making instructional and staffing choices, and taking on other administrative duties. They can therefore alleviate principals' burdens while also contributing to the establishment of a natural pipeline to the principalship. A recent report from the Center for Teaching Quality, the National Board for Professional Teaching Standards, and the National Education Association (2014) highlights teacher leaders' potential to extend their influence beyond school walls by informing decisions about education policy and practise within and beyond their district (Holtzhausen & Botha, 2019; Lawrence et al., 2018; Ryan et al., 2021; Wiggins & Smallwood, 2018).

Along with the benefits of teacher leadership for educational institutions, the combined duty of teaching and leading may be personally and professionally fulfilling when accompanied by administrative support. This hybrid job enables teacher leaders to enhance their instruction, create meaningful cooperation, increase their freedom and flexibility, acquire new skills, and get a better understanding of the school district's broad picture. (Ayoobzadeh & Boies, 2020) describe a variety of prospective teacher leader positions, including educational counselor, advisor, program design, head of department, grade-level chair, technical training supervisor, and technology coordinator. Whatever responsibilities teacher leaders take on, (Barrett et al., 2019) and others emphasise the necessity of providing high-performing teachers with career progression options that both elevate the profession and allow them to have the greatest influence on colleagues and children.

Teacher Leadership Models

While some may claim that "successful teaching equals leadership" and that all teachers are leaders, there are more precisely defined and institutionalised responsibilities that teacher leaders fulfil both within and outside the classroom. Given the fact that formal teacher leadership is a relatively new activity, there is a dearth of research to guide the development of best practises and theoretical frameworks. However, several studies emphasise the need of taking specific aspects into account when developing teacher leadership programmes. For example, (Nolan-Arañez & Ludvik, 2018) argue that instructors who are removed from the classroom on a full-time basis to assume leadership roles lose credibility with those who stay in the classroom. As such, the Teacher Leadership Explorative (Mahon, 2021) recommends the following: the creation of hybrid roles for teachers that allow them to remain in their classrooms for at least part of the day, the promotion of able to share or distributed leadership structures, and the provision of shared planning time, job-integrated professional development opportunities, and release time.

Numerous school systems have established teacher leadership programmes in response to local requirements by utilising "different methodologies and diverse definitions of the activity." For instance, Singapore's approach evolved in reaction to teacher shortages and low educational quality, and includes routes for master teachers, curriculum specialists, and school administrators. Similarly, the District of Columbia Public Schools and the Achievement First Charter Schools network established career progression, professional development, and enhanced recognition and remuneration systems to recruit and retain excellent teachers (Boak & Crabbe, 2019; Khan, Mubarik, Ahmed, et al., 2021; Shannon & Sebastian, 2018; Streeton et al., 2021; Vince & Pedler, 2018). The objective of teacher leadership in Denver Public Schools was to improve teachers' capacity to impact

student performance by leveraging the most effective teachers to help their colleagues. Long Beach Unified School District in California — recognised as a persistent improver in Battelle for Kids' Global Education Study (2012) based on several national and international evaluations — likewise placed a premium on professional development when developing leadership training for learners. The district places a premium on internally-led career development, which includes instructional coaches who evaluate and inform their colleagues' classroom instruction. The Center for American Progress recently examined a varied collection of top districts in the United States that allow for teacher participation during the Common Core implementation decision-making process (Lamprinou et al., 2021). Their research discovered that comparable sorts of teacher leadership possibilities are accessible in each district through interviews and observations. Teachers participating in district and school-level administration, teachers on work detail, and teachers in leadership positions who continue to practise in the classroom are all examples of these options. Teachers reported that they were able to have a good influence on professional development, collaborative time, and creating, producing, and selecting instructional materials as a consequence of these teacher leadership opportunities. The Center for American Progress proposes that districts introducing new standards establish teacher leadership positions at the class, school, and district levels (Franco & Antunes, 2020; Howard & Irving, 2021; Khattak & O'Connor, 2021; Li et al., 2021; Toledo et al., 2019). More precisely, their findings imply that district officials should "avoid entirely removing them [teacher leaders] from the classroom" and also that mixed teacher leadership and teacher special-assignment roles are worthwhile to investigate. Three broad kinds of teacher leadership emerge from these and other examples: 1) each teacher is a leader, 2) the teacher leader as a formal function, and 3) a combination or hybrid role. Furthermore, new teacher leadership methods are being adopted that will allow great instructors to reach a larger number of kids. The next sections will discuss and demonstrate instructor leadership styles in any of these three categories, and also a part on extended reach models (Ahmad et al., 2021; Haq et al., 2021; Nash, 2019; van Dalfsen et al., 2020).

Development of Conceptual Model

The suggested model was created primarily on the basis of many empirical investigations and a proposed leadership development toolbox. This model has three distinct variables: independent, mediating, and dependent. More precisely, the fundamental vision, national culture, institutional culture, and competitive strategy are the four independent factors that have a beneficial influence on teacher leadership development, ultimately benefiting educational institutions significantly. The suggested model for this investigation is depicted in Figure 1.

Figure 1: The Proposed model for Teacher Development and its' outcome
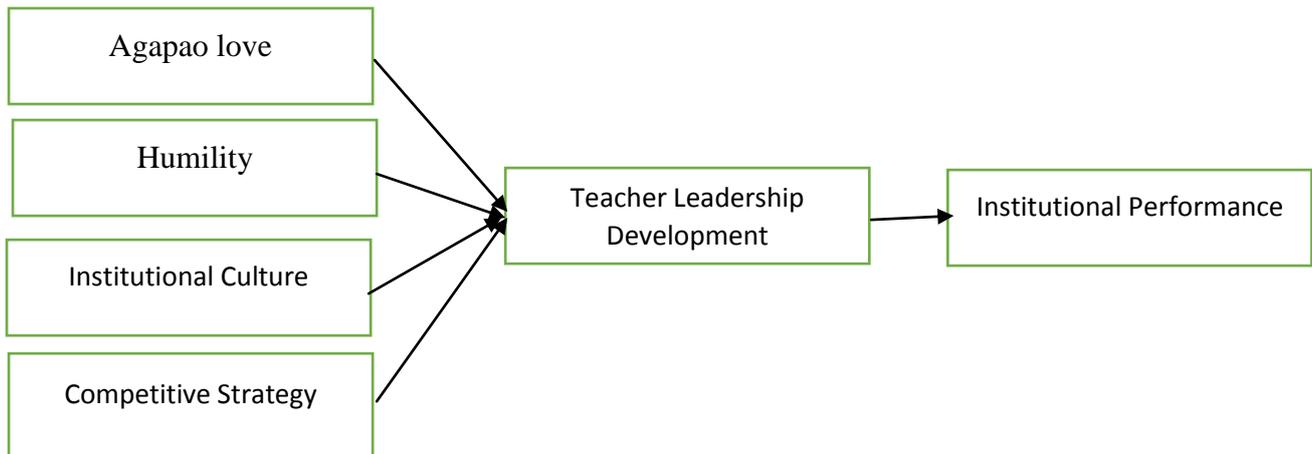
Agapao love: The connection between a disciple and a selfless leader is built on the foundation of love. According to Winston, love is a moral, social, and spiritual notion. This love enables leaders to view each individual as a human being with social beings, interests, and desires, rather than as a means to an end. The foundation of Patterson's servant leadership/follower relationship is agapao love. According to (Bradd et al., 2018), agapao refers to social or moral love. According to Winston (2002), this love compels leaders to view each individual as a whole person with needs, wants, and desires. According to Winston, this love is still alive and thriving in organisations where individuals who exhibit it adhere to what Winston refers to as the Golden Rule (do unto others as they would want you to do unto them). (Leadership & Leadership, 2020) discuss the benefits of value-based organisations and how the Golden Rule of "do unto others as you would have them do unto you" applies to everyone. (Turner et al., 2018) maintains that the Platinum Rule, which he promotes in his research on the Beatitudes, is equivalent. According to Swindoll (1981), servanthood and genuine love go hand in hand. Similarly, (Tripathi et al., 2020b) advise for leaders to strive for love, while Crom (1998) notes that servant leaders really care about people and are invested in their followers' lives. (Holtzhausen & Botha, 2019) assert that the servant leader's love is unconditional.

H1:   Agapao love has significant positive effect on positive institutional outcome through leadership development.

Humility: According to Sandage and Wiens, humility indicates that an individual does not focus exclusively on oneself or herself, but also on others and their qualities and capabilities. According to Swindell, humility does not imply that a person does not respect oneself or herself; rather, it implies that the individual does not regard himself or herself as superior or inferior to others. According to (Turner & Baker, 2018), humility is the capacity to put one's accomplishments and skills into context. This entails practising self-acceptance, but it also entails practising real humility, which is being focused on others rather than on oneself. (Wu & Crocco, 2019) contends that the servant's humility is not synonymous with low self-esteem, but rather with a healthy ego. In other words, humility does not imply a poor opinion of oneself or one's self-worth; rather, it implies that one views oneself in the same light that others do. The servant leader views humility as a reflection of an accurate self-evaluation and so maintains a low level of self-focus. (Tripathi et al., 2020b) asserts that good leaders preserve their humility by demonstrating respect for people and recognising their

contributions to the team. On the other hand, according to (Mejheirkouni, 2020), a servant leader's embrace of mystery and comfort with ambiguity demonstrates humility.

H2: *Humility has significant positive effect on positive institutional outcome through leadership development.*

Institutional Culture: Institutional culture is defined as a collection of shared values, beliefs, practices, and presumptions that emerge through the interaction of organization members and influence the standards by which members conduct themselves and accomplish organizational goals (Ryan et al., 2021). It is said that research on leadership development demonstrates a link between developing authority abilities and receiving the best administration's assistance or having an authoritative culture that promotes learning and improvement. According to (Ayoobzadeh & Boies, 2020), leadership development acknowledges the important role of authoritative culture in fostering professional flexibility and educating programme participants. Similarly, Guidroz et al. (2010) said that aligning leadership development with hierarchical culture establishes an obvious vision between an individual and an organisation and establishes organization-wide accountability for authoritative change attainment. According to (Barrett et al., 2019), the discrepancies in the application of initiative practises between nations may be applied to the inequalities in people's experiences across national cultures. Several studies, in particular, demonstrate that hierarchical culture is a mirror of its national culture and argue that when a national culture is deeply ingrained in individuals, authoritative culture will reflect it (Franco & Antunes, 2020; Lamprinou et al., 2021; Streeton et al., 2021). (Khattak & O'Connor, 2021) connect hierarchical culture to characteristics and initiative practises, claiming that authoritative culture is a result of human resource management methods that strengthen certain types of administrative behaviour. Similarly, authoritative culture is considered as a fundamental element determining LD. Hence, this study proposed the following hypothesis

H3: *Institutional culture has significant positive effect on positive institutional outcome through leadership development.*

Competitive Strategy: Porter (1998), the leading authority on competitive strategy, described competitive strategy as "the essence of contending with competition" (p. 21). He said that competitive strategy should place a premium on finding the optimal match between an unpredictable external environment and an agile internal environment by balancing both requirements (Ahmad et al., 2021; Haq et al., 2021; Nash, 2019). Thus, knowing the business competitive environment has an effect on the development of leadership in any institution (C. Longenecker & Insch, 2018; van Dalfsen et al., 2020). Numerous earlier research asserted that conduct is the primary predictor of leadership growth, therefore diminishing the usefulness of leadership skills (Tripathi et al., 2020a). They emphasised that rather than focusing exclusively on conduct, the primary criterion for leadership development should be the business's strategy and defined objectives. Additionally, (Megheirkouni & Mejheirkouni, 2020) implied that a distinct set of policies, characteristics, and practises is required for creating leaders in order to achieve competitive advantages. Numerous academics have argued that providing high-quality training, empowering employees, providing opportunities for career advancement, and developing decision-making abilities all contribute to leadership development in a competitive setting. Additionally, they claimed that competitive strategy drives every organization's leadership development process. Therefore, the fourth hypothesis is related with competitive strategy and states as below:

H4: *Competitive advantages has significant positive effect on positive institutional outcome through leadership development.*

Instrument Development

To obtain primary data, this study painstakingly constructed a questionnaire. Before sharing the final version, many measures were taken into consideration. These include operational and conceptual definitions for each variable; adhering to (Holtzhausen & Botha, 2019; Lawrence et al., 2018) principles of phrasing and measurement; scale construction, pre-test, validity, and completing the questionnaire. Due to the nature of quantitative analysis, this study attempted to eliminate open-ended questions whenever feasible. In terms of scale, the questionnaire utilised solely nominal and five-point Likert scales. Indeed, in contrast to ordinal and ratio scales, these are the two most often used scales in social research, particularly in behavioural measurement. No negative, leading, or laden questions were utilized (Ryan et al., 2021; Wiggins & Smallwood, 2018).

Each variable was derived from earlier research in the same field of leadership development. Before finishing the questionnaire to be disseminated, a pilot test was done to determine the reliability of each variable. Twenty teachers from five different schools in Karachi participated, and the results indicated a high degree of dependability, since the Cronbach alpha value for each item was more than 0.70. (Ayoobzadeh & Boies, 2020; Barrett et al., 2019). Similarly, panel members confirmed face and content authenticity. Finally, construct validity was determined using exploratory component analysis, and the factor loading value for each item was more than 0.60. With these assumptions in mind, a final questionnaire with three sections was designed. The first part included questions about demographic information such as position, age, and years of experience, to mention a few. The second portion was mostly produced on the basis of a conceptual model, and the third section was primarily focused on suggestions. The final part was included primarily to encourage responders to offer suggestions for enhancing their leadership abilities. The administrative approach used to collect data on an individual basis (Boak & Crabbe, 2019).

Sampling Strategy

The population for this study was mostly composed of instructors from schools in Pakistan that support basic and secondary education. However, this study disseminated the questionnaire primarily in Pakistan's two largest cities, Lahore and Karachi. These are two of Pakistan's most developed cities, with minimal social unrest. Only 36 schools consented to participate in this study after an invitation was extended to 121 institutions. This study gathered data from several respondents at each institution. While schools are permitted to gather data, they never divulge information on their workers. As a result, convenience sampling was utilised in this investigation. Additionally, this

method assures a higher response rate despite the bias issue. To avoid bias, this study randomly delivered questionnaires during the lunch period, when the majority of instructors were accessible. With a response rate of 36.5 percent, this survey collected 365 replies from 36 different schools in Lahore and Karachi.

Respondents' Characteristics

In terms of responder characteristics, about 71% of instructors are male (Table 1). Though the trend has shifted, the majority of females have yet to enter the workforce. 52.03 percent of respondents claimed having a master's degree, followed by a bachelor's degree (32.60) and a PhD. (15.34). In terms of age, the majority of responders were between the ages of 30 and 45. More precisely, 25.47 percent of respondents were between the ages of 30 and 35, followed by 35 to 40 (24.65 percent) and 40 to 45 (40.47 percent) (21.91 percent). Additionally, 18 responders were beyond the age of 50. According to the data, the majority of respondents had more than two but fewer than ten years of work experience. Simultaneously, 21.91 percent of respondents had more than ten years of experience working in schools. As a result, it is apparent that the responders to this survey are highly skilled and capable of providing useful information that aids in testing the hypothesis.

Table 1: Respondents Characteristics

Characteristics	Frequency	Percentage
Gender		
Male	259	70.96
Female	106	29.04
Age		
25-30	42	11.50
30-35	93	25.48
35-40	90	24.65
40-45	80	21.91
45-50	42	11.50
Above 50	18	4.93
Education		
Bachelor	119	32.60
Master	190	52.05
PhD	56	15.34
Experience		
Less than 2 years	73	20.00
2-6	119	32.60
6-10	93	25.48
More than 10	80	21.92

Measurement Model Assessment

The measuring model was examined for construct reliability and validity (which included discriminant and convergent validity). Cronbach's alpha coefficients were used to assess the reliability of each of the measurement model's main parameters (construct reliability). The values of all the distinct Cronbach alpha coefficients in this study varied from 0.835 to 0.906, above the suggested value of 0.7. Furthermore, for the purpose of assessing construct dependability, all CR (composite reality) values were greater than 0.7 (Werts, Linn, & Jöreskog, 1974; Kline, 2010; Gefen, Straub, & Boudreau, 2000). Thus, as seen in Table 2, construct reliability was reached, since Cronbach's CR and alpha were relatively error-free for all parameters. Factor loadings were used to analyse indication reliability. When the linked indicators are highly comparable, the construct reflects this, as indicated by the construct's high loadings (Hair et al., 2017). According to Hair et al. (2010), values greater than 0.70 indicate considerable factor loadings. As shown in Table 3, all publications included in this study had factor loadings larger than the recommended limit of 0.7. AVE (average variance extracted) was used to analyse convergent validity in this study, which is defined as the degree to which a measure is positively associated with the other measures of the same concept. All AVE values were between 0.706 and 0.842, above the recommended limit of 0.50. (Hair et al., 2010). Thus, as indicated in Table 2, all constructions satisfy the convergent validity requirement.

Table 2: Reliability, Composite Reliability and AVE

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Agapao love	0.883	0.920	0.741
Competitive Strategy	0.906	0.941	0.842
Humility	0.896	0.923	0.707
Institutional Culture	0.835	0.901	0.752
Institutional Performance	0.906	0.930	0.728
Teacher Leadership Development	0.896	0.923	0.706

Table 3: Factor Loading

	Agapao love	Competitive Strategy	Humility	Institutional Culture	Institutional Performance	Teacher Leadership Development
AL1	0.884					
AL2	0.870					
AL3	0.831					
AL4	0.859					
CS1				0.882		

CS2				0.850	
CS3				0.869	
HUM1			0.879		
HUM2			0.844		
HUM3			0.824		
HUM4			0.809		
HUM5			0.846		
IC1		0.918			
IC2		0.924			
IC3		0.911			
IP1					0.880
IP2					0.857
IP3					0.808
IP4					0.859
IP5					0.860
TLD1					
TLD2					
TLD3					
TLD4					
TLD5					

Discriminant Validity

The next step was to assess the latent constructs' discriminant validity. Discriminant validity states that a manifest variable is different from other constructs in the path model if its cross-loading value in the latent variable is larger than the cross-loading value in the other constructs. The discriminant validity was determined using the Fornell and Larcker criterion and cross-loadings. The proposed requirement is that no construct shall have the same variance as any other construct that exceeds its AVE value. The Fornell and Larcker criteria test was used to evaluate the model's squared correlations against correlations from other latent components. As shown in Table 4, all correlations were lower than the squared root of the average variance exerted along the diagonals, suggesting that discriminant validity was adequate. This demonstrated that the observed variables in each construct corresponded to the given latent variable, thereby confirming the model's discriminant validity, whereas Table 3 demonstrates that the cross-loading of all observed variables was greater than the construct's inter-correlations with all other observed variables in the model. As a result, these findings validated the cross-loadings assessment requirements and offered adequate support for the measurement model's discriminant validity. As a consequence, the proposed conceptual model was to be acceptable, with appropriate reliability, convergent validity, and discriminant validity confirmed, as well as the research model verified.

Table 4: Discriminant Validity

|	Agapao love	Competitive Strategy	Humility	Institutional Culture	Institutional Performance	Teacher Leadership Development
Agapao love	0.861					
Competitive Strategy	0.583	0.918				
Humility	0.510	0.616	0.841			
Institutional Culture	0.458	0.510	0.443	0.867		
Institutional Performance	0.595	0.600	0.586	0.504	0.853	
Teacher Leadership Development	0.676	0.716	0.634	0.553	0.704	0.840

Direct Effect of independent factors on Leadership Development and Positive Institutional Outcomes

The direct influence of all four independent factors on both leadership development and institutional performance was determined using structural equation modelling. Table 3 summarises the route coefficients for both direct effect and non-direct impact models. The findings revealed that the four predictor factors accounted for 66.1 percent of the variance in leadership development in Pakistani schools. All four elements had a role in the development of leadership. Among these, competitive strategy is the most influential, accounting for about 33.4 percent of the variance in leadership development. Numerous earlier investigations have shown comparable findings (Nathan, Scott and Rosanna 2015; Majd 2016). Apart from this predictor, Agapao love is also a significant factor in creating leadership in Pakistani schools, having a nearly 30.5 percent influence on leadership development. According to the path coefficient data, humility is the third most significant factor in building leadership in Pakistani schools, with a variance of 20.8. Interestingly, the findings revealed that institutional culture contributes just 15.1% to the development of leadership in schools. This may be an intriguing phenomenon in a classroom setting. While several earlier studies unanimously agreed that corporate culture plays a critical role in the development of leadership, it plays a smaller function in the context of educational institutions. Educational institutions, particularly schools, must strictly conform to the guidelines established by the Pakistani minister of education (Tim, Charles and Muhhmad 2003). As a result, a similar pattern may be found in nearly every school in Pakistan, reducing the predictive value of this variable.

Table 4: Path Coefficient

	Sample Mean (M)	Standard Deviation	T Statistics	P Values
Agapao love -> Teacher Leadership Development	0.305	0.062	4.991	0.000
Competitive Strategy -> Teacher Leadership Development	0.334	0.062	5.386	0.000
Humility -> Teacher Leadership Development	0.208	0.046	4.432	0.000
Institutional Culture -> Teacher Leadership Development	0.151	0.051	2.971	0.003
Teacher Leadership Development -> Institutional Performance	0.703	0.041	17.143	0.000
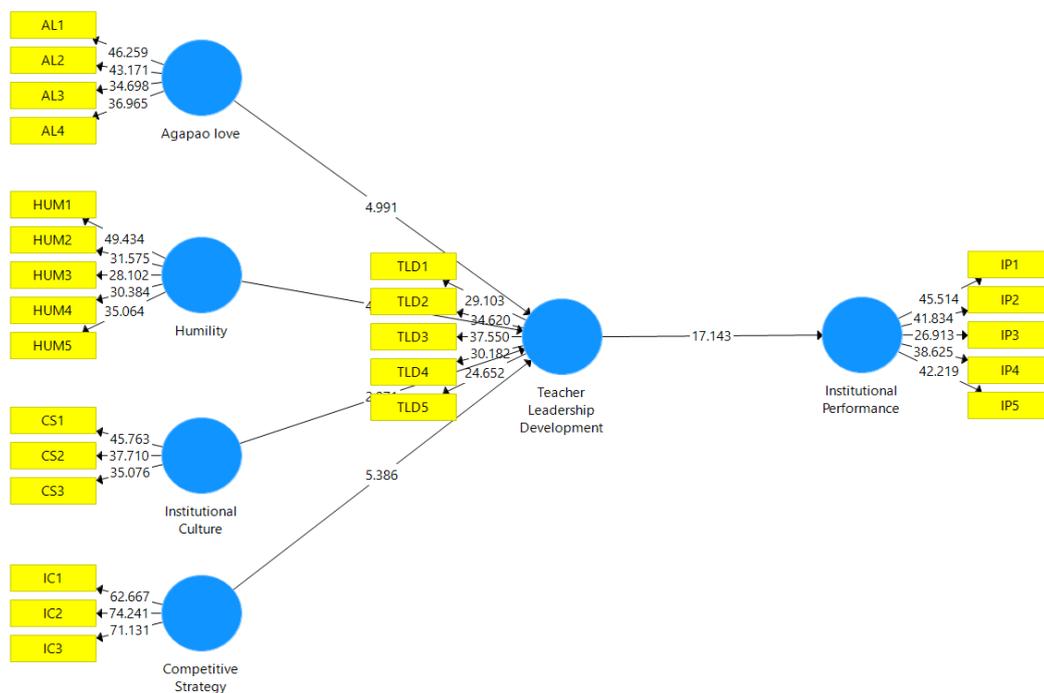
Mediating Effect of Leadership Development on Institutional Outcomes

The indirect impact was utilised to evaluate the mediating influence of leadership development on educational institution-related outcomes. Although the Sobel test is still widely used among behavioural researchers, there are several other approaches available, such as Structural Equation Modelling (SEM). SEM ultimately enables researchers to properly quantify the mediating impact. Table 5 summarises the indirect effect. Table 5 indicates that leadership development seems to have a substantial mediating influence on institutional performance, which is unsurprising given that the significance value for each of the four independent variables was less than 0.05. As a result, it is apparent that leadership development has a major mediating influence on institutional performance

improvement. Numerous earlier research discovered a significant mediating influence of leadership development on organisational results and concluded that creating an effective leadership strategy or approach is the primary issue for improving organisational outcomes (Boy and Maarten 2017).

Table 5: Total indirect Effect

	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Agapao love -> Institutional Performance	0.215	0.048	4.482	0.000
Competitive Strategy -> Institutional Performance	0.234	0.044	5.362	0.000
Humility -> Institutional Performance	0.146	0.035	4.154	0.000
Institutional Culture -> Institutional Performance	0.106	0.036	2.925	0.004

Discussions, Limitation and Further study

The findings clearly revealed that leadership development acts as a moderator in the relationship between three critical variables of LD and institutional output. More precisely, LD contributes significantly to the development of a conceptual model for this investigation. Indeed, leadership development is critical for institutional performance improvement, since a leader has always led their followers. The process of leadership growth may be accelerated by including agapao love, humility, a strong institutional culture, and an effective competitive strategy, all of which contribute to a substantial improvement in institutional performance. On the other hand, the findings indicate that institutional culture is not a significant predictor of leadership development and has little bearing on educational institutions' ultimate outcomes. While several earlier research discovered a substantial positive relationship, this study categorically contradicts the notion based on significant value. The study's setting is most likely one of the major reasons for its insignificance. In other words, while higher educational institutions are independent, schools, particularly in countries like Pakistan, are expected to obey certain norms and regulations established by the Ministry. Additionally, nearly every school in Pakistan adheres to a same culture and pattern of service delivery to their clients. Any educational institution has two objectives: to provide and to produce knowledge; however, the primary goal of schools is to deliver information rather than to create. As a result, institutional culture has a substantial impact on the development of leadership.

Examining Mediating Role of the Development of Principles' Leadership on the Performance of Higher Educational Institutions: A Quantitative Approach

The conclusions of this study contrast sharply with those of more recent studies, such as Hallinger (2015) and Harris (2015), to mention a few. They found that institutional culture has a significant impact on the development of leadership capabilities in any company. However, Day and Sammons (2013) concluded that institutional culture had a negligible influence on the development of leadership abilities, which is consistent with the findings of this study. Thus, this study established that the principles" vision, competitive strategy, and national culture are the three most important drivers of leadership development in educational institutions, all of which affect the institution's outcome.

Despite extensive efforts to reduce limitations, this work includes a few that can serve as a springboard for future research. This research gathered data mostly from primary and secondary schools. As a result, broadening the scope to include higher educational institutions would be acceptable. As a result, there is currently a gap in empirical research on the relationship between higher educational institutions and leadership development. Additionally, a small sample size has a substantial correlation with increased bias. As a result, more research may be done using a bigger sample size and more independent variables. Another critical component of this study that has been overlooked is gender bias. In contrast to industrialised countries, gender bias in leadership development is a pervasive problem in a large number of developing countries, particularly Pakistan. Thus, further research may be conducted on the gender influence on leadership development, particularly in educational institutions.

Indeed, this discovery fills a need in the empirical investigation of the mediating influence of LD on institutional outcomes. Additionally, these findings are applicable to all educational institutions, particularly elementary and secondary schools worldwide. Additionally, this study's conceptual model introduces a novel notion for LD and its impact on institutional outcomes, particularly on educational institutions. The current study demonstrates the importance of principles being visionary, particularly in light of global trends. Additionally, it is critical for principals to communicate this/her vision unambiguously to their subordinates, which ultimately aids in the development of leadership abilities. Similarly, maintaining a competitive edge in this changing corporate climate is the only way to ensure market viability. Additionally, technological development necessitates a greater degree of customer engagement in the educational process. Thus, having the appropriate competitive strategy in place and receiving sufficient support from the principle will bolster the leadership development process in schools, thereby greatly improving the institution's ultimate success. Similarly, this present study unanimously agreed that, unlike institutional culture, national culture

plays a vital influence in the development of the leader. It demonstrates unequivocally that governments must consider and establish the appropriate institutional strategy for their educational organisation in order to offer a world-class educational system. Additionally, the government must assure and develop a competitive, innovative, and intuitive curriculum that contributes to students' proficiency.

References

1. (Brian) Joo, B. K., Park, S., & Lee, S. (2020). Personal growth initiative: the effects of person–organization fit, work empowerment and authentic leadership. *International Journal of Manpower*, *42*(3), 502–517. https://doi.org/10.1108/IJM-02-2020-0056

2. Ahmad, S., Islam, T., Sohal, A. S., Wolfram Cox, J., & Kaleem, A. (2021). Managing bullying in the workplace: a model of servant leadership, employee resilience and proactive personality. *Personnel Review*. https://doi.org/10.1108/PR-06-2020-0470

3. Ayeleke, R. O., North, N. H., Dunham, A., & Wallis, K. A. (2019). Impact of training and professional development on health management and leadership competence: A mixed methods systematic review. *Journal of Health Organization and Management*, *33*(4), 354–379. https://doi.org/10.1108/JHOM-11-2018-0338

4. Ayoobzadeh, M., & Boies, K. (2020). From mentors to leaders: leader development outcomes for mentors. *Journal of Managerial Psychology*, *35*(6), 497–511. https://doi.org/10.1108/JMP-10-2019-0591

5. Barrett, P., Gaskins, J., & Haug, J. (2019). Higher education under fire: implementing and assessing a culture change for sustainment. *Journal of Organizational Change Management*, *32*(1), 164–180. https://doi.org/10.1108/JOCM-04-2018-0098

6. Boak, G., & Crabbe, S. (2019). Experiences that develop leadership capabilities. *Leadership and Organization Development Journal*, *40*(1), 97–106. https://doi.org/10.1108/LODJ-07-2018-0254

7. Bradd, P., Travaglia, J., & Hayen, A. (2018). Developing allied health leaders to enhance person-centred healthcare. *Journal of Health Organization and Management*, *32*(7), 908–932. https://doi.org/10.1108/JHOM-01-2018-0015

8. Cai, X., Gura, D., & Kurilova, A. (2021). Stakeholders' impact on the leadership potential of small and medium-sized construction enterprises. *Engineering, Construction and Architectural Management*. https://doi.org/10.1108/ECAM-04-2021-0290

9. Dalakoura, A. (2010). Differentiating leader and leadership development: A collective framework for leadership development. *Journal of Management Development*, *29*(5), 432–441. https://doi.org/10.1108/02621711011039204

10. David, S. A., & Abukari, A. (2020). Perspectives of teachers' on the selection and the development of the school leaders in the United Arab Emirates. *International Journal of Educational Management*, *34*(1), 56–69. https://doi.org/10.1108/IJEM-02-2019-0057

11. Dennis, R. S., & Bocarnea, M. (2005). Development of the servant leadership assessment instrument. *Leadership & Organization Development Journal*, *26*(8), 600–615. https://doi.org/10.1108/01437730510633692

12. Douglas, S., Merritt, D., Roberts, R., & Watkins, D. (2021). Systemic leadership development: impact on organizational effectiveness. *International Journal of Organizational Analysis*. https://doi.org/10.1108/IJOA-05-2020-2184

13. Dwyer, L. P. (2019). Leadership self-efficacy: review and leader development implications. *Journal of Management Development*, *38*(8), 637–650. https://doi.org/10.1108/JMD-03-

2019-0073

14. Franco, M., & Antunes, A. (2020). Understanding servant leadership dimensions: Theoretical and empirical extensions in the Portuguese context. *Nankai Business Review International*, *11*(3), 345–369. https://doi.org/10.1108/NBRI-08-2019-0038

15. Haq, I. U., Raja, U., Alam, I., De Clercq, D., & Saleem, S. (2021). Servant leadership and mistreatment at the workplace: mediation of trust and moderation of ethical climate. *Personnel Review*. https://doi.org/10.1108/PR-04-2019-0172

16. Hayward, S. (2011). Connecting leadership development to bottom line benefits. *Strategic HR Review*, *10*(1), 28–34. https://doi.org/10.1108/14754391111091788

17. Hickman, L., & Akdere, M. (2018). Effective leadership development in information technology: building transformational and emergent leaders. *Industrial and Commercial Training*, *50*(1), 1–9. https://doi.org/10.1108/ICT-06-2017-0039

18. Hirudayaraj, M., & Sparkman, T. E. (2019). Building leadership capacity: a framework for disruptive events in tourism. *Industrial and Commercial Training*, *51*(2), 114–124. https://doi.org/10.1108/ICT-09-2018-0077

19. Holtzhausen, M. M., & Botha, P. (2019). Combining interventions: an innovative leadership development program. *Journal of Management Development*, *40*(3), 240–252. https://doi.org/10.1108/JMD-06-2019-0280

20. Howard, C. S., & Irving, J. A. (2021). A cross-cultural study of the role of obstacles on resilience in leadership formation. *Management Research Review*, *44*(4), 533–546. https://doi.org/10.1108/MRR-02-2020-0067

21. Huber, S. G. (2013). School leadership and leadership development: Adjusting leadership theories and development programs to values and the core purpose of school. *Journal of Educational Administration*, *51*(4), 669–684. https://doi.org/10.1108/09578230410563665

22. Khan, M. M., Mubarak, S., & Islam, T. (2020). Leading the innovation: role of trust and job crafting as sequential mediators relating servant leadership and innovative work behavior. *European Journal of Innovation Management*. https://doi.org/10.1108/EJIM-05-2020-0187

23. Khan, M. M., Mubarik, M. S., Ahmed, S. S., Islam, T., Khan, E., Rehman, A., & Sohail, F. (2021). My meaning is my engagement: exploring the mediating role of meaning between servant leadership and work engagement. *Leadership and Organization Development Journal*, *42*(6), 926–941. https://doi.org/10.1108/LODJ-08-2020-0320

24. Khan, M. M., Mubarik, M. S., Islam, T., Rehman, A., Ahmed, S. S., Khan, E., & Sohail, F. (2021). How servant leadership triggers innovative work behavior: exploring the sequential mediating role of psychological empowerment and job crafting. *European Journal of Innovation Management*. https://doi.org/10.1108/EJIM-09-2020-0367

25. Khattak, M. N., & O'Connor, P. (2021). The interplay between servant leadership and organizational politics. *Personnel Review*, *50*(3), 985–1002. https://doi.org/10.1108/PR-03-2020-0131

26. Lamprinou, V. D. I., Tasoulis, K., & Kravariti, F. (2021). The impact of servant leadership and perceived organisational and supervisor support on job burnout and work–life balance in the era of teleworking and COVID-19. *Leadership & Organization Development Journal*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/lodj-12-2020-0526

27. Lawrence, E., Dunn, M. W., & Weisfeld-Spolter, S. (2018). Developing leadership potential in graduate students with assessment, self-awareness, reflection and coaching. *Journal of Management Development*, *37*(8), 634–651. https://doi.org/10.1108/JMD-11-2017-0390

28. Leadership, S., & Leadership, S. (2020). Perceived servant leadership: the impact of servant leadership on intrinsic and extrinsic job satisfaction. *Human Resource Management International Digest*, *28*(2), 27–29. https://doi.org/10.1108/HRMID-11-2019-0267

29. Li, D., Li, Y., Hu, Y., & Tu, Y. (2021). How do servant leadership and self-esteem at work

shape family performance in China? A resource gain development perspective. *Management Decision*, *71872139*. https://doi.org/10.1108/MD-08-2020-1104

30. Longenecker, C., & Insch, G. S. (2018). Senior leaders' strategic role in leadership development. *Strategic HR Review*, *17*(3), 143–149. https://doi.org/10.1108/shr-02-2018-0014

31. Longenecker, C. O., & Insch, G. S. (2019). Leadership development learning accelerators: voices from the trenches. *Development and Learning in Organizations*, *33*(2), 12–15. https://doi.org/10.1108/DLO-07-2018-0084

32. Maheshwari, S. K., & Yadav, J. (2018). Leadership development strategy: the missing links. *Development and Learning in Organizations*, *32*(1), 11–14. https://doi.org/10.1108/DLO-04-2017-0038

33. Maheshwari, S. K., & Yadav, J. (2019). The role of HR in leadership development. *Development and Learning in Organizations*, *33*(5), 20–23. https://doi.org/10.1108/DLO-11-2018-0141

34. Mahon, D. (2021). Can using a servant-leadership model of supervision mitigate against burnout and secondary trauma in the health and social care sector? *Leadership in Health Services*. https://doi.org/10.1108/LHS-01-2021-0001

35. McGurk, P. (2010). Outcomes of management and leadership development. *Journal of Management Development*, *29*(5), 457–470. https://doi.org/10.1108/02621711011039222

36. Mcquade, K. E., Harrison, C., & Tarbert, H. (2021). Systematically reviewing servant leadership. *European Business Review*, *33*(3), 465–490. https://doi.org/10.1108/EBR-08-2019-0162

37. Megheirkouni, M. (2018). Leadership and management development post-war: exploring future trends. *International Journal of Organizational Analysis*, *26*(1), 107–128. https://doi.org/10.1108/IJOA-06-2017-1176

38. Megheirkouni, M., & Mejheirkouni, A. (2020). Leadership development trends and challenges in the twenty-first century: rethinking the priorities. *Journal of Management Development*, *39*(1), 97–124. https://doi.org/10.1108/JMD-04-2019-0114

39. Mejheirkouni, A. (2020). Exploration of servant leadership and volunteers' commitment in the nonprofit and voluntary sector in war zones. *International Journal of Public Leadership*, *16*(4), 375–391. https://doi.org/10.1108/ijpl-06-2020-0045

40. Nash, J. A. (2019). *Developmental Factors Influencing Effective Leaders: A Life Story View of Executive Leadership Development*. *15*, 225–245. https://doi.org/10.1108/s1746-979120190000015006

41. Nolan-Arañez, S. I., & Ludvik, M. B. (2018). Positing a framework for cultivating spirituality through public university leadership development. *Journal of Research in Innovative Teaching & Learning*, *11*(1), 94–109. https://doi.org/10.1108/jrit-08-2017-0018

42. Nandal, N. Impact of product innovation on the financial performance of the selected organizations: A study in indian context. Psychol. Educ. J. 2021, 58, 5152–5163.

43. Reams, J., Fikse, C., & Ness, O. (2020). Leadership Development Laboratory. *Maturing Leadership: How Adult Development Impacts Leadership*, 37–57. https://doi.org/10.1108/978-1-78973-401-020201004

44. Ryan, N. F., Hammond, M., MacCurtain, S., & Cross, C. (2021). Overcoming risk for women in leader identity development. *Journal of Managerial Psychology*, *36*(1), 75–88. https://doi.org/10.1108/JMP-03-2019-0178

45. Schedlitzki, D. (2019). Developing apprentice leaders through critical reflection. *Higher Education, Skills and Work-Based Learning*, *9*(2), 237–247. https://doi.org/10.1108/HESWBL-09-2018-0095

46. Shannon, E., & Sebastian, A. (2018). Developing health leadership with Health LEADS

Australia. *Leadership in Health Services*, *31*(4), 413–425. https://doi.org/10.1108/LHS-02-2017-0002

47. Sharp, G. F., & Marchetti, J. J. (2020). Playing in the Sandbox: A Reflective Journey on the Development and Implementation of a Leadership Development Program within a Doctoral Program. *Maturing Leadership: How Adult Development Impacts Leadership*, 241–259. https://doi.org/10.1108/978-1-78973-401-020201013

48. Simkins, T., Sisum, C., & Memon, M. (2003). School leadership in Pakistan: Exploring the headteacher's role. *School Effectiveness and School Improvement*, *14*(3), 275–291. https://doi.org/10.1076/sesi.14.3.275.15841

49. Streeton, A. M., Kitsell, F., Gambles, N., & McCarthy, R. (2021). A qualitative analysis of vertical leadership development amongst NHS health-care workers in low to middle income country settings. *Leadership in Health Services*. https://doi.org/10.1108/LHS-11-2020-0089

50. Toledo, J. C., Gonzalez, R. V. D., Lizarelli, F. L., & Pelegrino, R. A. (2019). Lean production system development through leadership practices. *Management Decision*, *57*(5), 1184–1203. https://doi.org/10.1108/MD-08-2017-0748

51. Tripathi, D., Priyadarshi, P., Kumar, P., & Kumar, S. (2020a). Does servant leadership affect work role performance via knowledge sharing and psychological empowerment? *VINE Journal of Information and Knowledge Management Systems*. https://doi.org/10.1108/VJIKMS-10-2019-0159

52. Tripathi, D., Priyadarshi, P., Kumar, P., & Kumar, S. (2020b). Micro-foundations for sustainable development: leadership and employee performance. *International Journal of Organizational Analysis*, *28*(1), 92–108. https://doi.org/10.1108/IJOA-01-2019-1622

53. Turner, J. R., & Baker, R. (2018). A review of leadership theories: identifying a lack of growth in the HRD leadership domain. *European Journal of Training and Development*, *42*(7–8), 470–498. https://doi.org/10.1108/EJTD-06-2018-0054

54. Turner, J. R., Baker, R., Schroeder, J., Johnson, K. R., & Chung, C. H. (2019). The global leadership capacity wheel: Comparing HRD leadership literature with research from global and indigenous leadership. *European Journal of Training and Development*, *43*(1–2), 105–131. https://doi.org/10.1108/EJTD-07-2018-0061

55. Turner, J. R., Baker, R., Schroeder, J., Johnson, K. R., & Chung, C. hung. (2018). Leadership development techniques: Mapping leadership development techniques with leadership capacities using a typology of development. *European Journal of Training and Development*, *42*(9), 538–557. https://doi.org/10.1108/EJTD-03-2018-0022

56. van Dalfsen, G., Van Hoecke, J., Westerbeek, H., & Bosscher, V. De. (2020). Coaches' views on how to develop shared leadership. *Sport, Business and Management: An International Journal*, *11*(3), 265–286. https://doi.org/10.1108/SBM-12-2019-0123

57. Vince, R., & Pedler, M. (2018). Putting the contradictions back into leadership development. *Leadership and Organization Development Journal*, *39*(7), 859–872. https://doi.org/10.1108/LODJ-04-2018-0134

58. Wiggins, L., & Smallwood, J. (2018). An OD approach to leadership development: questions and consequences. *Journal of Management Development*, *37*(8), 613–623. https://doi.org/10.1108/JMD-12-2016-0306

59. Wu, Y., & Crocco, O. (2019). Critical reflection in leadership development. *Industrial and Commercial Training*, *51*(7–8), 409–420. https://doi.org/10.1108/ICT-03-2019-0022