Transformational leadership and the learner-centred teaching approach

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Adopting learner-centred teaching approaches is important to advance student performance in Mexican rural communities, which have historically been disadvantaged. Yet, little research exists on the factors that might promote the use of this teaching approach. In the study reported on here we examined the associations between principals’ transformational leadership, school climate, teacher commitment to learners, and learner-centred teaching practices. In total, 174 teachers were selected from 26 tele-secondaries in the state of Tabasco, Mexico. A structural equation model was calculated. Results do not provide evidence to support a direct association between transformational leadership and the use of learner-centred teaching. However, an indirect relationship was found between the effects of school climate and teacher commitment. These findings indicate that enhancing school climate and teachers’ commitment through a transformational leadership style are key to foster an environment for learner-centred teaching.

Keywords: leadership; rural education; school climate; school principal; teaching

Introduction

Despite governmental efforts, educational gaps are greater in disadvantaged communities in Mexico, especially in rural locations (National Institute for the Evaluation of Education [INEE for its Spanish acronym], 2019b). Rural communities in Mexico not only face poverty and high rates of school dropouts, but the alarming issue of the potential academic lag of rural learners compared with their peers from urban communities. This condition is especially concerning for a country where about 24.5% of its population lives in rural areas (National Institute of Statistic and Geography [INEGI for its Spanish acronym], 2019).

The Mexican government strives to provide its citizens with the knowledge and skills needed to continue with higher secondary education, but with limited results. Additionally, providing lower secondary education to the 11th largest population in the world has proven to be unaffordable and difficult for a country that has about 200,000 rural and far-flung communities (National Population Council [CONAPO by its Spanish acronym], 2014). In 1968, the Mexican government launched the tele-secondary project as an effort to expand educational coverage across the country. Although the tele-secondary system has gone through various reforms to improve its educational plans and programmes, the performance of tele-secondary students on standardised tests is still poorer than students from regular schools (INEE, 2019a; Wolff, De Moura Castro, Navarro & García, 2002).

Meanwhile, as the country continues striving to figure out the factors that might improve educational effectiveness, Lewis, Boston and Peterson (2017) highlight that globalisation has shifted what is expected and necessary from educators to advance learners into 21st century requirements. In other words, the end goals are shifting and evolving at the same time that educators in the country are trying to figure out how to meet them and close academic lag as well. Although the literature suggests that learner achievement depends on multiple factors (Gilar-Corbi, Miñano, Veas & Castejón, 2019; Murillo Torrecilla & Román Carrasco, 2011), the adoption of learner-centred teaching approaches in classrooms has proven to be a determinant factor influencing overall learner performance in a number of studies (Cordero & Gil-Izquierdo, 2018; Lazarides & Buchholz, 2019; Witziers, Bosker & Krüger, 2003).

Whereas international studies have provided consistent evidence that demonstrate the positive effects of learner-centred teaching on learner performance, domestic education policy had to evolve. Recently, the Mexican government not only endorsed, but also required the adoption of learner-centred teaching strategies in classrooms (Gobierno de México, 2019). However, its adoption at a policy level cannot ensure implementation by itself. In fact, what still remains unclear is how Mexican teachers will engage in this kind of teaching (Bonilla-Ruiz, 2020). Undeniably, Mexican schools must transform themselves into institutions capable of educating individuals to face the changing social, political, and economic conditions of a globalised world. Nevertheless, this paradigm shift requires steady efforts from at least two of the main school stakeholders: principals and teachers.
Background
The tele-secondary system was created to complement rather than replace traditional lower secondary school in Mexico. It was launched in 1968 by the Mexican government as a means to extend lower secondary education to rural and isolated communities across the country (Wolff et al., 2002). Typically, learners who enrol in this educational system come from disadvantaged backgrounds (Secretary of Public Education [SEP by its Spanish acronym], 2010). While the northern states enrol less than 10% of tele-secondary learners, between 39% and 45% come from the states of Zacatecas, Veracruz, Hidalgo, Tabasco, and Puebla (INEE, 2005). Currently, 18,754 tele-secondaries serve 1.43 million of Mexican learners, representing 21.4% of all junior secondary learners in the country (Navarro-Sola, 2019). The tele-secondary system became quite important for some states, such as Tabasco, which currently has 17 municipalities and about 285 small communities. This state is considered as highly marginalised. About 30% of its population has only attended primary education (INEGI, 2015). Tabasco currently ranks 9th of 32 states in terms of marginalisation in the country. To reduce these social gaps, the Mexican government has built 453 tele-secondary schools to educate Tabasqueños children. Nowadays, these institutions represent 59.8% of public educational institutions in the state (INEE, 2018a).

The system uses television to provide a full, 3-year secondary education to learners who, for a wide variety of reasons, would not otherwise have access to schooling beyond the sixth grade. The tele-secondary model is pretty simple; lessons corresponding to grades 7 to 9 are delivered through television programmes that were planned and prepared by specialised teachers (INEE, 2018b). Tele-secondaries may have either a principal that acts as a leader of a tiny and small staff or has principals with the dual mission of teaching and principal activities. While in the past, a pioneer model was used in response to a growing school-age population and a rising demand for education at a lower education level (Shapiro & Trevino, 2004), its effects have not reduced educational gaps in Mexican rural communities.

Literature Review
While the changing policy landscape of education demands that schools raise their standards of learner achievement, school leaders’ performance remains in the spotlight of academic discussion. Even though international researchers (Day, Gu & Sammons, 2016) agree on the difficulty in linking leadership and learner outcomes, scholars suggest a simple and logical way to do so. Specifically, it is argued that leadership has an indirect or mediated positive effect on learner performance through the (re)construction of a culture focused on learner development (Day, Sammons, Hopkins, Harris, Leithwood, Gu, Brown, Ahtarirod, & Kington, 2009; Gu & Johansson, 2013; Hallinger & Heck, 2010; Robinson, Lloyd & Rowe, 2008; Witziers et al., 2003). Under this perspective, leaders are expected to positively influence school organisation, culture and conditions, and through these, improve the quality of teaching, learning and learner achievement as well (Hallinger & Heck 2010). Unsurprisingly, this assumption has led scholars to postulate that the principal’s leadership is one of the most important factors influencing not only school climate but also learner achievement (Franken, Branson & Penney, 2018).

Although school leaders seem to be capable of influencing the whole academic context, teacher performance seems to be the most important factor while seeking learner performance improvements (Leithwood, Day, Sammons, Harris & Hopkins, 2006). In this regard, Boberg and Bourgeois (2016) assert that teacher performance is likely to be influenced by school leaders, as teachers tend to be motivated, encouraged, and inspired by the examples of their leaders. As a result, teacher performance, including teaching practices adopted in the classroom, are likely to be influenced by school leaders (Leithwood & Jantzi, 2006; Rhodes, Camic, Millburn & Lowe, 2009). Hence, if the role of a school principal is considered an important factor in ensuring the effectiveness of the school, then the principal’s leadership style is essential for encouraging teachers’ commitment to engage in a certain teaching style.

What is now considered effective leadership had to evolve in response to global challenges. In the past, principals acted as managers or administrators; nowadays their role has been altered by the changing nature of society, political expectations, and school organisation (Marks & Priny, 2003; Smith, 2016). Principals used to be primarily administrative managers (Valentine & Prater, 2011), but they now must be knowledgeable and skilled in collaboration practices (Leone, Warnimont & Zimmer, 2009; Marks & Nance, 2007) to advance school performance in modern societies. In other words, principals have been required to change from transactional toward transformational leadership. Clearly, this paradigm shift has resulted in a move away from bureaucratic control toward reshaping the entire culture in schools, including teaching practices in classrooms (Hallinger & Heck, 2010; Walker & Slear, 2011). The positive influence of transformational leadership on follower outcomes and the development of a positive school environment is broadly accepted throughout the literature (Bass, 1997; Kurland, Peretz & Hertz-Lazarowitz, 2010; Robinson & Gray, 2019; Vos, Van der Westhuizen, Mentz & Ellis, 2012; Wang & Degol, 2016).
Transformational leadership has also gained support among scholars due to its positive impact on teaching commitment (Al-Mahdy, Emam & Hallinger, 2018; Bird, Wang, Watson & Murray, 2009; Liu & Werblow, 2019).

The effects of principal leadership on school climate and teacher commitment remains a crucial factor in adoption of learner-centred practices in classrooms. Additionally, overall teacher performance in classrooms has been linked by a considerable number of scholars to school climate (Brault, Janosz & Archambault, 2014; Park, JH & Lee, 2015) and teacher commitment (Imo & Ekpenyong, 2018; Ross & Gray, 2006). Therefore, the role of school climate and teacher commitment remains crucial to educational quality, as they seem to moderate teacher behaviour to align with the goals and strategies set by school leaders. Regardless of the roles of mediating variables, the vision and ultimate goal of institutions should be working together through transformational leadership that leads all stakeholders to achieve the goals set by the institutions (Lewis et al., 2017).

**Transformational leadership**

Transformational leadership represents the process of influencing major changes in the attitudes, beliefs, and values of the followers to a point where the goals of an organisation and the vision of the leaders are internalised. Under these conditions, followers typically achieve performance beyond what is found from other leadership styles (Bass, 1985). As a result, leaders get followers’ best efforts by inspiring them to identify a vision that surpasses their own immediate self-interests (Bass, Avolio, Jung & Berson, 2003). In fact, this style has been shown to enable both leaders and followers to rise to higher levels of ethics and motivation (Khain, 2007).

Some studies have found that high-functioning schools had transformational principals who were able to shape and focus the vision for the school and established a school culture that fostered teacher empowerment (Kurland et al., 2010; Valentine & Prater, 2011). Given that transformational leaders have staff members committed to a shared goal, these staff members are often more satisfied and committed in their teaching positions (Cohen, McCabe, Michelli & Pickeral, 2009; Vos et al., 2012).

**School climate**

School climate can also be defined as the atmosphere created by social relations, values, attitudes, and feelings shared by the actors of the school (Cohen et al., 2009; Dula & Karadag, 2017). School climate expresses the overall personality of the school. It is often associated with the behaviour of teachers, learners and other members from the educational institution. As Huang and Cornell (2016) argue, school climate reflects the quality of the academic environment. Particularly, the school climate encompasses all teachers’ shared perceptions of their overall work environment at a given institution. It is possible to distinguish internal features of a school and its impact on the behaviour of its staff members (Cohen et al., 2009; Owens, 2004). In fact, school climate is seen as a useful construct for studying the characteristics of a school that positively impact learner achievement (Dula & Karadag, 2017).

The literature supports the role of principals as the most decisive factor in promoting a positive school climate (Franken et al., 2018; Murillo Torrecilla & Román Carrasco, 2011); the kind of leadership that principals exert remains a key component in developing and sustaining a positive school climate (Beckley, 2012; Cheema & Kitchens, 2014).

**Teacher commitment to the learner**

The teacher’s commitment to the learner is conceptualised as an individual’s willingness to invest personal resources to the teaching task (Nir, 2002; Park, I 2005). Kangas, Siklander, Randolph and Ruokamo (2017) define it as a teacher’s cognitive, behavioural, and emotional involvement in teaching methods and their interest in learners and their learning process. Teaching commitment begins with the teacher’s recognition that the learner is an authentic party in the learning process. This acknowledgment leads to a positive interest and active involvement in the learner’s creation of knowledge and intellectual progress (Lazarides & Buchholz, 2019; Starr-Glass, 2019).

Although some scholars have linked leadership to teacher performance, the results are still contradictory and mixed. For instance, while some scholars (Imo & Ekpenyong, 2018; Ross & Gray, 2006) report that transformational leadership consistently predicts teachers’ willingness to exert extra effort and to change their classroom practices, other scholars did not find consistent evidence to support this relationship (Day et al., 2016; Marks & Printy, 2003).

**Learner-centred teaching practices**

Learner-centred teaching is based on the idea of an active learner (Good & Lavigne, 2018). This approach focuses on learner variables and learning processes as critical to positive learner outcomes (Granger, Bevis, Saka, Southerland, Sampson & Tate, 2012). Under this approach, the teacher does not function as the primary source of knowledge in the classroom; on the contrary, teachers are seen as facilitators or coaches who assist learners to build their learning. Unlike teacher-centred teaching, learner-centred approaches allow learners to influence their own fate but are always guided by
By placing learners at the centre of the class, this approach shifts the focus from teaching to learning, and promotes an environment for learners to become independent and achieve more knowledge on their own (Bransford, Brown & Cocking, 2000). In fact, a large number of studies (Cordero & Gil-Izquierdo, 2018; Lazarides & Buchholz, 2019) have shown that the shift from traditional teaching to learner-centred teaching can lead to improved learner learning outcomes.

Theoretical Framework
Our study was framed by transformational leadership theory (Leithwood, 1994). It was adopted as a means to explore workplace conditions that contribute to the adoption of learner-centred teaching strategies by Mexican teachers in rural classrooms. According to Hallinger (2003), the practice of transformational leadership is ideal in schools as it attempts to change the conditions that impact school climate and the quality of curriculum and instruction delivered to learners in classrooms. Moreover, it provides intellectual direction and aims at innovation within the institution, while empowering and supporting teachers (Conley & Goldman, 1994; Leithwood, 1994), which are conditions that ultimately increase their commitment (Burns, 1978). Under this framework, practitioners focus on problem finding, problem solving, and collaboration to achieve shared goals (Hallinger & Heck, 1996). As other scholars (Allen, Grigsby & Peters, 2015; Baptiste, 2019; Rana, Malik & Hussain, 2016), we posit that the transformational leadership theory remains crucial to explore and understand the contextual conditions that lead school communities to certain behaviour that advance their development and improvement.

The present study
Despite the unequivocal interest in adopting learner-centred teaching practices in Mexico, insufficient attention has been given to the effects of principal leadership on teaching practices adopted in Mexican classrooms. Therefore, analysing the application of transformational leadership in rural Mexican communities becomes important for enhancing educational practices, which may hopefully be later turned into social development as well. In our study we explored the relationship among principals’ degree of transformational leadership, school climate, teacher commitment to the learner, and the adoption of learner-centred teaching practices (see Figure 1). Based on the literature, a positive direct effect of principal transformational leadership was expected on school climate, teacher commitment, and learner-centred teaching practices. Also, it was expected that school climate and teacher commitment would favour the adoption of learner-centred teaching approaches. The indirect effects anticipated were that principals’ transformational leadership would affect learner-centred teaching practices by its positive effect on school climate and teacher commitment.

![Figure 1](image)

**Figure 1** Theoretical model of the relationship among principals’ transformational leadership, school climate, teacher commitment to the learners, and learner-centred teaching practices

**Methodology**

Participants
The study was carried out during the first semester (January-June) of 2019. The population came from rural tele-secondary schools (N = 373) situated in high social marginality localities in the state of Tabasco, Mexico (INEGI, 2015). The sites of study were 26 rural tele-secondary schools. In total, 174 teachers of these schools were randomly selected (N = 316 teachers, p = 95%, q = .50, e = 5%); 86 (49.4%) were male and 88 (50.6%) female. The teachers were aged between 28 and 60 years old (M
At the time of the study, they had an average of 15.5 (SD = 8.2 years) years of teaching experience. In terms of academic level, 63.8% reported holding bachelor, 32.8% master and 3.4% doctoral degrees.

**Measures**

**Transformational leadership**  
An adapted Transformational Leadership Scale was used (Griffith, 2004). This scale used nine Likert-type items (0 = never, 4 = always) to measure teachers’ perceptions of three components of principal leadership: (a) charisma or inspiration (3 items, α = .82; e.g., Principal encourages staff to talk about instruction); (b) individualised consideration (3 items, α = .80; e.g., Principal treats me with respect); and (c) intellectual stimulation (3 items, α = .84; e.g., Principal encourages me to come up with new ideas). The results of the Confirmatory Factorial Analysis (CFA) showed a good adjusted fit of the measurement model to the data ($\chi^2 = 8.81$, $df = 5$, $p = .11$; Tucker-Lewis index [TLI] = .98; standardized root-mean-square residual [SRMR] = .01; adjusted goodness of fit index [AGFI] = .94; comparative fit index [CFI] = .99; root-mean-square of approximation [RMSEA] = .05, confidence interval [CI] 90% [.03, .07]).

**School climate**  
The School Culture and Climate Scale was used (SCCS; Barkley, Lee & Eadens, 2014). The scale consists of nine items (e.g., “There is good communication among teachers,” α = .80). The scale responses are in Likert-type format with five options: 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree), 5 (strongly agree). The CFA showed a good fit of the model to the data ($\chi^2 = 6.85$, $df = 6$, $p = .23$; TLI = .98, SRMR = .01; AGFI = .95; CFI = .99; RMSEA = .04, CI 90% [.01, .06]).

**Teacher commitment to the learners**  
The teacher’s commitment to learners was assessed using a 2-factor scale (Nir, 2002) with eight items using the same Likert format as above. One 4-item subset assessed teachers’ commitment to children’s academic achievement (e.g., “It is my responsibility to advance all my students for high academic achievements,” α = .82). A second 4-item subset evaluated teachers’ commitment to the social integration of children (e.g., “I have to be aware of the social relations among students in my class and assist whenever needed to improve them,” α = .81). The CFA showed a good fit index of the model to the data ($\chi^2 = 6.94$, $df = 5$, $p = .14$; TLI = .98, SRMR = .02, AGFI = .94; CFI = .99; RMSEA = .04, CI 90% [.02, .08]).

**Learner-centred teaching**  
The scale of the Staffordshire Evaluation of Teaching Styles (Mohanna, Chambers & Wall, 2007) was adapted for the purpose of the study. The scale consists of six items that illustrate learner-centred teaching practices (α = .80; e.g., “I like to give students opportunity to explore how to learn”). It was answered with the same Likert scale as above. The CFA shows a good fit of the model to the data ($\chi^2 = 8.94$, $df = 5$, $p = .11$; TLI = .96, SRMR = .01; AGFI = .94; CFI = .98; RMSEA = .07, CI 90% [.03, .08]).

**Procedure**  
Firstly, we gained ethical permission to conduct the study from the Ethical Research Committee of the Autonomous Juarez University of Tabasco. Then, several school administrators were visited in order to get approval to access schools. Finally, a letter of informed consent was signed by the teachers who participated in the study. The items were answered by teachers in approximately 15 minutes and were administered by the researchers.

**Data Analysis**  
Lost data represented 1% of the sample. In all cases, the lost items were treated using the regression imputation method. Firstly, descriptive and correlational analyses were performed. Subsequently, the relationship model between the variables was tested using structural equations with the support of AMOS 20. The maximum likelihood estimation method (ML) was used with the AMOS bootstrap (2,000 repetitions, CI 95%). The model evaluation used adjustment indexes proposed by Byrne (2016): $\chi^2$, $p$ (chi-square and associated probability) $> .001$, TLI $\geq .90$, SRMR $\leq .05$, CFI $\geq .95$, RMSEA CI 90% (error of the root-mean-square of approximation with its confidence interval) $\leq .05$.

**Results**  
Table 1 presents means, standard deviations, and correlations between the study variables. These results suggest that Mexican teachers perceive transformational leadership practices from their principals. However, it does not seem to be a frequent practice. Results also indicate that principal leadership positively correlates with school climate and learner-centred teaching practices. Finally, school climate shows a positive correlation to teacher commitment to the learners.
Table 1 Mean, standard deviations and correlations between principal transformational leadership, school climate, teacher commitment to the learners, and learner-centred teaching

<table>
<thead>
<tr>
<th>Variables</th>
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<td>1) Transformational leadership</td>
<td>3.11</td>
<td>.87</td>
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<td>2) School climate</td>
<td>3.66</td>
<td>.44</td>
<td>.44***</td>
<td></td>
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<tr>
<td>3) Teacher commitment to the learners</td>
<td>3.34</td>
<td>.59</td>
<td>.50***</td>
<td>.53***</td>
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<tr>
<td>4) Teacher learner-centred teaching</td>
<td>3.49</td>
<td>.50</td>
<td>.32***</td>
<td>.42***</td>
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Note. ***p < .001.

Structural Model
The values of the adjustment indices were acceptable, suggesting that the theoretical model was based on the data ($\chi^2 = 196.87$, $df = 162$, $p = .032$; TLI = .97; SRMR = .04; CFI = .98; RMSEA = .04, CI 90% [.01, .05]; BIC = 280.25; AIC = 411.35). The model explained 35% of the variance of the scores of the teacher’s learner-centred teaching strategies.

Figure 2 shows that values of the standardised coefficients were significant and that they coincided with the proposed theoretical model. Teacher perceptions of transformational leadership were positively related to school climate ($\beta = .49$, $p < .001$) and to commitment to learners as well ($\beta = .33$, $p < .001$). On the other hand, school climate had a positive relationship to teachers’ commitment ($\beta = .36$, $p < .001$) and the use of learner-centred methods ($\beta = .32$, $p < .001$). Likewise, higher commitment was related to higher use of learner-centred strategies ($\beta = .32$, $p < .001$).

Discussion
While world requirements change rapidly, educational systems around the globe are in the
spotlight and responsible for equipping learners with a wide range of skills and knowledge. As a result, similar to other countries, Mexico is constantly searching for new ideas and practices to improve learner performance. The starting point for this study was acknowledging the relevance of transformational leadership to stimulate learner-centred teaching as a means to improve learner achievement. Specifically, we posited that schools relied on the principal’s leadership of the organisation to shape and reshape positive features in the school climate that are capable to enhance teaching practices and learner outcomes as well. Although previous research (Baptiste, 2019; Sebastian, Allensworth & Huang, 2016) found that transformational leadership had an important effect on teacher and learner performance, no previous study had examined the mechanisms through which such influence occurs.

The ways that transformational leaders might lead Mexican tele-secondary teachers to adopt a learner-centred approach in classrooms were explored using quantitative methods. The adoption of transformational leadership theory resulted to be a suitable framework to test the proposed model.

**Transformational Leadership’s Direct Effect on School Climate, Teacher Commitment, and Learner-centred Teaching Practices**

From the analysis above, results show that transformational leadership did not directly correlate to the adoption of learner-centred teaching in Mexican tele-secondary classrooms. A similar pattern of results was obtained in other studies (AlSaedi & Male, 2013; Day et al., 2016; Marks & Printy, 2003) where scholars found that a school’s ability to improve was not directly the result of the principals’ leadership style. However, findings suggest that principals’ transformational leadership did have an indirect influence on learner-centred teaching practices by their effects on school climate and teachers’ commitment to learners.

Principals’ transformational leadership was positively associated to school climate. These results are in line with those of other studies (Allen et al., 2015; Bass & Riggio, 2006; Hallinger & Heck, 1996) which reported transformational leaders having a positive impact on school climate, from the school teachers’ perspective. A possible explanation is that when school communities believe that their principal exhibits a high level of idealised attributes, they feel more comfortable with their leader, and as a result, more positive about the overall school climate.

The analysis also showed evidence for the positive association between transformational leadership and teacher commitment. This result ties well with previous studies (Imo & Ekpenyong, 2018; Rana et al., 2016; Ross & Gray, 2006; Stewart-Banks, Koufie, Hakim & Branch, 2015), where transformational leadership was found to improve the commitment of stakeholders from school communities. In this regard, like Kuhnert (1994), we believe that individuals who exhibit transformational leadership often have an important set of internal values, ideals, and behaviour that motivate staff members to get involved and committed to institutional goals.

**School Climate Relationship with Teachers’ Commitment**

The analysis of school climate demonstrates two things. Firstly, results add to the literature providing supporting evidence of the association between school climate in Mexican rural schools and teachers’ commitments of teachers to the learner. Others (Collie, Shapka & Perry, 2011; Ross & Gray, 2006) have shown similar results in the past. In this regard, like Rhodes et al. (2009), we believe a positive climate encourages cooperation, trust, and openness among staff members. Teachers who perceive a positive school climate are more likely to get involved and committed, not only to the learner but also to achieve institutional goals. Secondly, our analysis showed a positive association between school climate and the adoption of learner-centred teaching. It is important to note that we are unaware of a similar analysis in previous studies. However, we believe that the existence of a positive school climate must be a pre-requisite to foster any school strategy, including the adoption of a teaching approach.

**School Climate and Teacher Commitment Relationships with Learner-centred Teaching Approaches**

Our findings also add supporting evidence that school climate favours the use of learner-centred teaching. In the past, other scholars (Collie et al., 2011; Ross & Gray, 2006) have shown the role of school climate on teacher practices. In this regard, like Rhodes et al. (2009), we believe that a positive climate encourages cooperation, trust, and openness among staff members and learners.

We also found evidence of the positive relationship between teacher’s commitment and the adoption of learner-centred teaching in Mexican rural schools. This finding is consistent with other studies (De Rijdt, Stes, Van der Vleuten & Doych, 2013; Kim & Hwang, 2017) where teachers’ traits – including professional insights – had significant results on their practice and conceptions of teaching and learning. We believe that this finding was quite predictable as teachers who are committed to learners tend to be willing to try any promising academic strategy in order to improve learner outcomes.
Principal’s Transformational Leadership has Indirect Effect on Learner-centred Teaching Practices

Overall, Mexican rural teachers perceived a certain level of transformational leadership in their principals. However, these findings demonstrate that this type of leadership is incapable by itself to ensure the adoption of learner-centred teaching practices. However, together, the findings confirm that school climate and teachers’ commitment to learners are significant pathways through which transformational leadership influences the adoption of learner-centred teaching in Mexican rural classrooms.

From the findings above, we believe that this has important theoretical implications because it helps to understand how principals’ transformational leadership influences teaching practices. The effect of transformational leadership on using learner-centred approaches is fully mediated by their influence on school climate and teacher commitment to learners’ learning. In a practical way, we suggest that principal leadership should encourage positive school climates to facilitate teachers to adopt learner-centred approaches. Positive school climate must be considered a pre-requisite for the use of learner-centred teaching. Therefore, principals, as school leaders, must prioritise and support any strategy aimed to improve it. Furthermore, Mexican rural principals should always prioritise the welfare of teachers as a means to raise their commitment to the school and the learners as well. The findings call for the need to provide institutional support to promote teachers’ commitment to learners as a bridge for disseminating the practice of learner-centred teaching.

Despite the relevance of these findings, the results have limitations and should be interpreted with caution. Specifically, the cross-sectional design does not allow causal relations to be established between the explored variables. In this regard, longitudinal or experimental designs will help to gain a better understanding of these relations. Moreover, this sample came from a particular area of Mexico, which may or may not be similar to other populations. All these conditions limit the generalisation of the findings. Further studies must include teachers of diverse regions of the country.

Conclusion

Results of the study clearly indicate that transformational leadership is important for nurturing and stimulating a climate where teachers are more likely to engage in actions that positively impact learner academic performance. Even though these findings suggest that transformational leadership is incapable to influence the adoption of learner-centred teaching practices alone, this leadership style is an important influence on school climate and teacher commitment as well. Therefore, there is a need for this leadership as a means to foster such conditions. Nonetheless, further research is needed to understand whether Mexican teachers are able to identify the differences between traditional and transformational leadership.

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Authors’ Contributions

DEMM: conceptualisation, research design, statistical analyses, and preparation of the original draft; SPAZ: conceptualisation, research design, and editing original manuscript; AAVC: statistical analyses, and writing; LGPP: conceptualisation and writing. All authors reviewed the final manuscript.

Notes

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