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ABSTRACT

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Professional Learning Communities (PLCs) are regarded as an effective form of ongoing professional development that addresses the needs of both students and teachers. They are proven approaches adopted to overcome internal challenges within schools. However, the successful implementation of effective PLCs can be limited by various factors, particularly in contexts characterized by resource constraints and high-stakes examination pressures, such as in Lebanon. This study examined five cultural dimensions that promote an effective PLC structure: peer collaboration, collective responsibility, reflective dialogue, faculty influence, and de-privatized practice. The research employed a quantitative methodology, utilizing descriptive and inferential statistical analysis of survey data collected from 213 teachers in Lebanese private schools. The results indicated that peer collaboration ranked first, emphasizing the importance teachers assign to addressing daily challenges collaboratively. Reflective dialogue was ranked second, demonstrating the extent to which teachers utilize student outcomes in their discussions. Collective responsibility and faculty influence followed, suggesting that although these areas are still considered strengths, teachers feel more comfortable collaborating with colleagues than with management. De-privatized practices ranked last and were identified as an area needing improvement. This suggests that collaboration is limited to necessary practices and is not deeply rooted in psychological safety, highlighting an opportunity for fostering a more open and trusting environment. The inferential analysis revealed significant positive correlations among all dimensions, confirming that a holistic approach targeting all dimensions simultaneously is necessary for an effective PLC structure. This study provides insights for decision-makers on promoting continuous professional development and enhancing educational quality within the Lebanese context and beyond.

Contribution/Originality: This study contributes to the existing literature by examining and ranking cultural dimensions in Lebanese private schools and analyzing their interrelationships. It highlights the need for holistic PLC development in resource-constrained, exam-driven contexts.

1. INTRODUCTION

Teachers' practices are changing rapidly due to the swift development of technology and its integration into the classroom. This has made professional development programs a key element for teachers to cope with and adapt to these changes (Burner, 2018; Kowalczyk-Walędziak, Korzeniecka-Bondar, Danilewicz, & Lauwers, 2019; Negrín-Medina, Bernárdez-Gómez, Portela-Pruaño, & Marrero-Galván, 2022). During the COVID-19 period, teachers were compelled to transition to online teaching and adapt their methods to suit the circumstances. New skills needed to be

acquired quickly to address the challenges, and investments were made in professional development programs to facilitate this transition (Paetsch, Franz, & Wolter, 2023). In addition to the health crisis, Lebanon has been facing economic and political instability, which has directly affected the education sector. This situation has resulted in limited budgets, shortages of human resources, and insufficient time to complete the academic year (Al Maalouf & Al Baradhi, 2024). On top of that, the military conflict in the south of Lebanon and Beirut, during the fall of the academic year 2024-2025, has increased learning loss. A swift, coordinated multi-level response is necessary to save the academic year (Shuayb et al., 2024). Continuous professional development of teachers to cope with changes, crises, displacement, and instability is becoming imperative. It is essential to provide proper education to students, preserve their current academic year, and prepare them for the future.

A successful continuous professional development program is based on a continuous improvement cycle that consists of assessing students to identify the next steps, supporting teachers in practices that help them achieve these steps, and evaluating the impact of these new practices on student learning (Jensen, Roberts-Hull, & Hunter, 2016). Many factors might limit the achievement of the intended outcomes of a professional development program. These factors include the involvement of the audience, the relevance of the content to their needs, the resources required during the program, the resources necessary for implementing new practices, the work environment and context, and time constraints (Darling-Hammond, Hyler, & Gardner, 2017; Timperley, 2008). Referring to the factors and the educational context in Lebanon from 2018 to the present, the output of a structured professional development program might not be successful. Referring to Khalil Al-Jammal and Ghamrawi (2013), the benefits of the teachers' professional development are limited. Based on the counties' built-up complex situation since 2013, the findings regarding the professional development program remain. The findings of a more recent study on the state of professional development programs in Lebanon from the principals' perspectives show that there is no decisive positive stance towards these programs (Mhanna, 2025).

Professional Learning Communities (PLCs) are among the up-to-date approaches tried and adopted internationally to overcome internal challenges in schools (Leclerc & Labelle, 2012; Worapun, Khamdit, & Siridhrungsri, 2022). It is also considered a continuous professional learning that is tailored to the students' and teachers' needs to improve teachers' practices and students' academic performance (Long, Li, Huang, & Fu, 2024; Meeuwen, Huijboom, Rusman, Vermeulen, & Imants, 2020; Servage, 2009). According to DuFour, DuFour, Eaker, and Many (2016), there is a set of six essential attributes that a PLC must have: student learning and experiences, collaborative teams, collective inquiry, action-oriented, continuous improvement, and results-oriented. Although PLCs have a major role in driving change in education, their implementation might face a number of challenges related to time limitation, external factors such as policies and socio-economic factors, the experience level of teachers, lack of proper planning and coordination, and leadership support (Akkary, 2014; Long et al., 2024; Louis & Kruse, 1995; Schlager & Fusco, 2003). To overcome or reduce these challenges, an in-depth look at the PLC structure and practices at the institutions has to be completed (Vescio, Ross, & Adams, 2008). As per Farah and Frayha (2022), the private schools in North Lebanon that adopt a professional development program are qualified to be professional learning communities. In addition, the school leaders can play the role of promoting professional learning communities (Farah & Frayha, 2022; Haddad, 2014). These studies examine teachers' and school leaders' familiarity with various attributes related to establishing a PLC structure. Supovitz (2002) identified five measurable dimensions within a PLC school framework: peer collaboration, faculty influence, collective responsibility, reflective dialogue, and de-privatized practice. When these cultural dimensions are integrated into teachers' daily routines, they foster a supportive learning environment that promotes continuous learning and improvement. As teaching practices evolve and improve, student performance tends to enhance correspondingly.

An effective PLC structure refers to a framework that actively enhances both teaching quality and student outcomes. When implemented correctly, it can support a higher quality of education despite the current ongoing economic and political challenges in Lebanon. To build and sustain an effective PLC structure, school leaders and

decision-makers need to identify areas requiring improvement and reinforce existing strengths. Within this context, this study aims to explore the dimensions of a PLC school structure in private schools in Mount Lebanon by addressing the following questions:

- What are the dimensions of a PLC structure that require improvement? What are the strongest dimensions of a PLC structure?
- What are the relationships between the five dimensions of a PLC structure?

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1. Professional Learning

Professional learning involves acquiring additional skills and knowledge that can assist individuals in their current professions. It is especially important in dynamic fields that evolve based on research or real-time observations, such as education, healthcare, business, science, and social sciences (Webster-Wright, 2009). In the education sector, to optimize and sustain teachers' professional learning, institutions must implement processes and policies of learning organizations (Admiraal, Schenke, De Jong, Emmelot, & Sligte, 2021). An educational institution can be considered a learning organization when its structure, specifically its policies and processes, allows teachers to learn and develop professionally, guides staff toward a shared vision, and utilizes staff capacity to achieve the intended objectives (Giles & Hargreaves, 2006; Kools & Stoll, 2016; Mulford, 2005).

2.2. Professional Learning Communities

Professional Learning communities join two concepts of professional learning and communities. Communities are defined as social units. These units are formed by individuals who meet regularly, have common values or interests, and develop a sense of belonging and mutual support (MacQueen et al., 2001). In education, professional learning communities are a group of teachers/educators who have the student as the center of their interest, work collaboratively to learn, through practice and experience, how to better serve their students (Servage, 2009). PLCs also have an essential role in facilitating teachers' progression (Long et al., 2024). Referring to Harris and Jones (2010), professional learning communities are made up of dedicated professionals who are connected and collaborate to improve schools overall and drive change for the benefit of students. To serve the intended outcome of the professional learning communities, researchers set a list of requirements to make these communities function well. Hord (1997) identified five requirements for professional learning communities to achieve the intended outcomes for teachers and students: supportive and shared leadership, collective learning, shared values and vision, supportive conditions, and shared personal practice. A sixth attribute, supportive conditions, was later added to the above (Hipp & Huffman, 2003). To effectively implement professional learning communities, six essential attributes should be retained: student learning and experiences, collaborative teams, collective inquiry, action-oriented, continuous improvement, and results-oriented (DuFour et al., 2016). In addition, seven elements characterize an educational institution as a learning organization with the collaborative professional learning community structure: developing and sharing a vision centered on student learning, creating and supporting continuous learning opportunities, promoting team learning and collaboration, establishing a culture of inquiry, innovation, and exploration, embedding systems for collecting and exchanging knowledge and learning, learning with and from the external environment, and modelling and growing learning leadership (Admiraal et al., 2021; Kools & Stoll, 2016). According to Supovitz (2002), the attributes of professional learning communities were operationalized into five measurable dimensions within the school structure context: peer collaboration, faculty influence, collective responsibility, reflective dialogue, and de-privatized practice. The above frameworks have been developed and implemented in Western contexts, which differ from the educational context in Lebanon or similar countries. As per Farah and Frayha (2022), private schools in Lebanon have the needed infrastructure to adopt a PLC structure. In addition, Haddad (2014) emphasized the importance of the integrative and reflexive roles of school leaders in the success of professional learning communities.

A closer examination of the PLC dimensions as an integrated concept within the school culture in the Lebanese context could provide a better understanding to facilitate intervention and establish an effective PLC structure.

2.2.1. Peer Collaboration

Peer collaboration refers to the cooperation among teachers within the same educational institution concerning instructional, curricular, and administrative matters. Collaboration is defined as teachers exchanging ideas, conducting research, designing curricula, and implementing shared educational strategies. Research indicates a significant positive correlation between teacher collaboration, changes in teaching practices, and improvements in students' academic achievement (Timperley, 2007; Vescio et al., 2008). School structures should promote and encourage teachers to meet, socialize, and discuss stress-related stories about students' behavior, so that relational bonds become stronger between teachers (Bell-Robertson, 2014; Papatraianou & Le Cornu, 2014). This relationship would also translate into collegial support to achieve a common professional goal, leading to long-term growth and development (Newberry, Sanchez, & Clark, 2018).

2.2.2. Faculty Influence

This dimension represents the extent to which teachers are engaged in decisions related to finance, recruitment, institutional policies, and other administrative activities (Supovitz, 2002). Teachers involved in the decision-making process within an educational institution are more aware of the institution's shared goals. Therefore, their learning to achieve these goals is guided and facilitated (Eriş, Kayhan, Baştaş, & Gamar, 2017). Even involving teachers on a small scale might help to shift towards more effective school-based management. This can lead to an increase in teachers' motivation, commitment, and job satisfaction, which will be reflected in their practices and students' performance (Mokoena & Machaisa, 2018; Musengamana, Shaoan, Namanyane, Lafferty, & Uzochukwu, 2024; Olcum & Titrek, 2015).

2.2.3. Collective Responsibility

This dimension relates to how much teachers feel responsible for students and the learning environment beyond academic performance (Stoll, Bolam, McMahan, Wallace, & Thomas, 2006; Supovitz, 2002). Collective responsibility refers to the effort exerted by the teachers of an educational institution as a group to organize and implement plans aimed at achieving a common goal – enhancing student performance (Voelkel Jr & Chrispeels, 2017). In a collaborative structure of PLCs, teachers are actively engaged and are responsible for their own learning as well as the learning of their colleagues. This approach leads to improvements in teachers' instructional practices and those of their colleagues. Additionally, these improvements may be reflected in students' performance (Fred, Meeuwen, Pierre, Ellen, & Marjan, 2020).

2.2.4. Reflective Dialogue

Reflection dialogue represents meaningful interactions between colleagues on instructional and curricular issues. Meaningful interactions are those that include inputs such as data from student academic or behavioral records and teachers' observations and outputs, such as decisions to try new approaches or judgments. These interactions also help reduce the gaps between theory and practice (Darling-Hammond et al., 2017; Kowalczyk-Walędziak et al., 2019; Supovitz, 2002). For learning to occur, teachers must be given the time and space to reflect critically on their work in order to build new knowledge, perspectives, and practices regarding the content, instruction, and students (Linda Darling-Hammond & McLaughlin, 2011; Huijboom, 2022; Rock & Levin, 2002). The process of reflecting on current practices, generating new ideas, and implementing them leads to a better understanding of how teachers are currently teaching. This may result in changes to teachers' practices (Stoll et al., 2006; Valckx, Devos, & Vanderlinde, 2018; Wahlstrom & Louis, 2008).

2.2.5. De-Privatized Practice

This attribute pertains to the level of trust among teachers, specifically regarding the extent to which teachers within the same educational institution observe each other's practices and provide constructive feedback (Stoll et al., 2006; Supovitz, 2002; Wahlstrom & Louis, 2008). A supportive and psychologically safe work environment is essential for a professional learning community to function effectively. To establish this environment, trust and respect must be present among teachers. When these elements are in place, teachers can openly share their thoughts and the challenges they face (Benade, 2018; Nguyen, Collins, & Ngo, 2023; Wang, 2016). Higher levels of trust between teachers result in more supportive and broader shared practice (Bryk & Schneider, 2004; Tschannen-Moran, 2009; Wang, 2016). In addition, mutual confidence and reliability between teachers strongly impact their behaviors, attitudes, relationships, and willingness to engage in learning and collaborate (Chen, Lee, Lin, & Zhang, 2016).

In Lebanon, educational policies and practices are established based on a combination of cultural, political, economic, and hierarchical factors (Abdul-Hamid & Yassine, 2020; Shuayb, 2019). These factors affect the collaborative practices and teachers' involvement in decisions and challenge the implementation of an effective PLC structure. As per Al-Jammal (2015), the main challenges to implementing professional learning communities are related to the customs and traditions of the school, which are based on structural relationships. Although local studies have explored the familiarity of school staff with PLC attributes, focusing on aspects of collaboration and leadership, an in-depth analysis of the PLC dimensions in terms of teachers' practices remains limited in existing research. Therefore, this study aims to examine and rank the five dimensions and analyze the interrelationships between them, providing grounded insights for school leaders and decision-makers.

2.3. Conceptual Framework

Figure 1 shows the relationships to be examined among the different dimensions of a school culture to effectively implement professional learning communities.

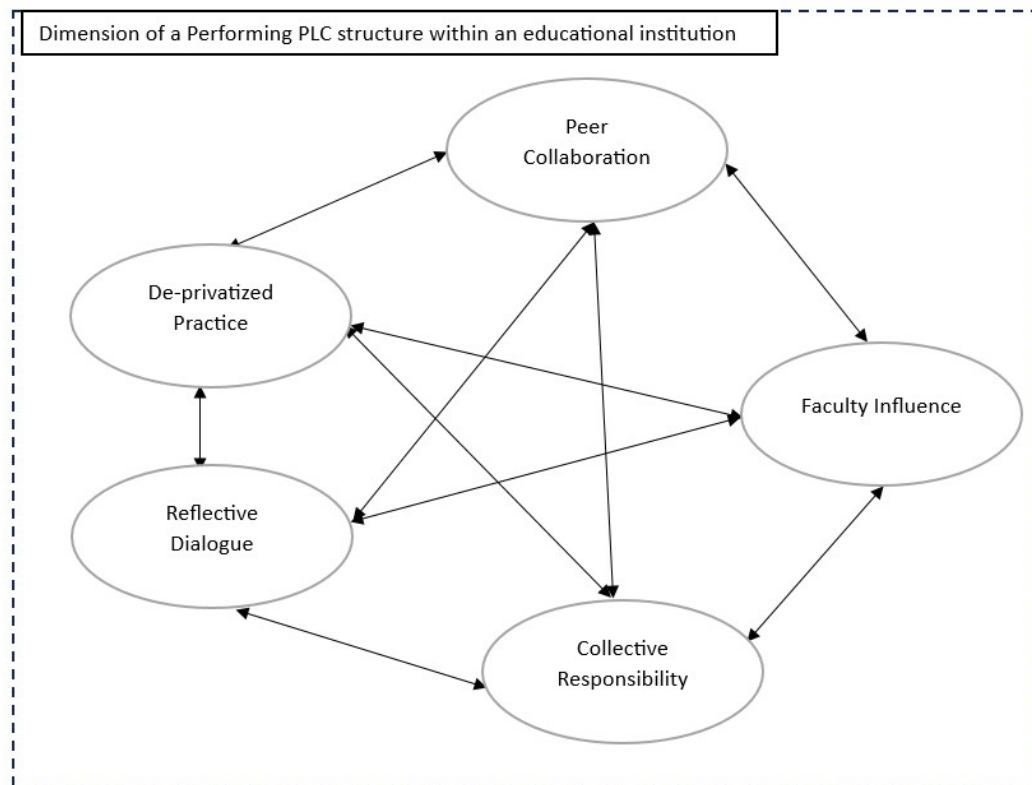


Figure 1. The relationships to be tested between the different dimensions of a school culture for a performing PLC.

3. METHODOLOGY

This study employed a descriptive quantitative research design to examine the relationships among the five dimensions of school culture in implementing a performing PLC structure. This design facilitates the description of existing patterns and the testing of relationships among the dimensions. The study's population consisted of secondary school teachers working in private schools located in Mount Lebanon. The researcher utilized convenience sampling through direct contact with school administrations and professional networks. Although this approach enabled access to willing participants, it may limit the generalizability of the findings. Approximately 300 teachers were invited to participate in the survey, with 213 teachers responding, resulting in a response rate of 71%. To ensure broad representation, the sample included teachers from various areas within the targeted governorate, working in schools of different sizes (number of students) and types (Anglophone and Francophone).

3.1. Data Collection and Data Analysis

Data for this study were collected using a pre-validated survey designed to measure the five mentioned dimensions, the School Culture Scale (Supovitz, 2002). The survey consisted of six parts, each comprising statements and questions developed on a Likert-type scale to quantify teachers' perceptions and experiences. The sections of the survey are: Part A - Demographics, Part B - Peer Collaboration, Part C - Faculty Influence, Part D - Collective Responsibility, Part E - De-privatization Practices, and Part F - Reflective Dialogue. The construct validity of the survey has been confirmed as strong through factor analyses conducted by the Consortium for Policy Research in Education and the Consortium on Chicago School Research. Additionally, Cronbach's alpha coefficients indicated high internal consistency across all sections: Peer Collaboration (.74), Collective Responsibility (.94), Faculty Influence (.85), De-privatization (.75), and Reflective Dialogue (.83). Prior to implementation, the instrument was reviewed by field experts to ensure content validity and clarity of the statements and questions. Participants completed the survey online, with the purpose of the study clearly stated on the cover page of the survey.

The data collected were then coded and entered into SPSS software to generate descriptive statistics for the participants' demographics and responses. In addition to testing the relationships between the dimensions, the Spearman Rho correlation coefficient (r_s) was calculated. This coefficient was chosen based on the nature of the data sets, both of which are ordinal and non-parametric (Likert scale). A significance level of $p < 0.05$ was set as the threshold for determining statistical significance. Table 1 lists the hypotheses tested.

Table 1. Research hypotheses (H1–H15) and their corresponding null hypotheses (H01–H015).

Research hypothesis		Corresponding null hypothesis.	
H1	There is a statistically significant relationship between the "peer collaboration" dimension and the "faculty influence" dimension.	H01	There is no statistically significant relationship between the "peer collaboration" dimension and the "faculty influence" dimension.
H2	There is a statistically significant relationship between the "peer collaboration" dimension and the "collective responsibility" dimension.	H02	There is no statistically significant relationship between the "peer collaboration" dimension and the "collective responsibility" dimension.
H3	There is a statistically significant relationship between the "peer collaboration" dimension and the "reflective dialogue" dimension.	H03	There is no statistically significant relationship between the "peer collaboration" dimension and the "reflective dialogue" dimension.
H4	There is a statistically significant relationship between the "peer collaboration" dimension and the "de-privatized practice" dimension.	H04	There is no statistically significant relationship between the "peer collaboration" dimension and the "de-privatized practice" dimension.
H5	There is a statistically significant relationship between the "faculty influence" dimension and the "collective responsibility" dimension.	H05	There is no statistically significant relationship between the "faculty influence" dimension and the "collective responsibility" dimension.
H6	There is a statistically significant relationship between the "faculty influence" dimension and the "reflective dialogue" dimension.	H06	There is no statistically significant relationship between the "faculty influence" dimension and the "reflective dialogue" dimension.
H7	There is a statistically significant relationship between the "faculty influence" dimension and the "de-privatized practice" dimension.	H07	There is no statistically significant relationship between the "faculty influence" dimension and the "de-privatized practice" dimension.

Research hypothesis		Corresponding null hypothesis.	
H8	There is a statistically significant relationship between the “collective responsibility” dimension and the “reflective dialogue” dimension.	H08	There is no statistically significant relationship between the “collective responsibility” dimension and the “reflective dialogue” dimension.
H9	There is a statistically significant relationship between the “collective responsibility” dimension and the “de-privatized practice” dimension.	H09	There is no statistically significant relationship between the “collective responsibility” dimension and the “de-privatized practice” dimension.
H10	There is a statistically significant relationship between the “reflective dialogue” dimension and the “de-privatized practice” dimension.	H010	There is no statistically significant relationship between the “reflective dialogue” dimension and the “de-privatized practice” dimension.
H11	There is a statistically significant relationship between the “peer collaboration” dimension and the school culture.	H011	There is no statistically significant relationship between the “peer Collaboration” dimension and the school culture.
H12	There is a statistically significant relationship between the “faculty influence” dimension and the whole school culture.	H012	There is no statistically significant relationship between the “faculty influence” dimension and the whole school culture.
H13	There is a statistically significant relationship between the “collective responsibility” dimension and the whole school culture.	H013	There is no statistically significant relationship between the “collective responsibility” dimension and the whole school culture.
H14	There is a statistically significant relationship between the “de-privatized practices” dimension and the whole school culture.	H014	There is no statistically significant relationship between the “de-privatized practices” dimension and the whole school culture.
H15	There is a statistically significant relationship between the “reflective dialogue” dimension and the whole school culture.	H015	There is no statistically significant relationship between the “reflective dialogue” dimension and the whole school culture.

3.2. Ethical Consideration

Ethical considerations were of primary importance and guided every step of this research to ensure the reliability of data collection and analysis, as well as the protection of participants' rights. Participation was voluntary, and participants were informed of their right to withdraw at any time without facing any pressure. Additionally, participation was anonymous; teachers' email addresses and full names were not collected. All collected data were stored securely and used solely for the academic purpose of the study, thereby contributing to educational knowledge.

4. RESULTS

This section presents the descriptive and inferential statistics of responses from 213 participants in the survey. Table 2 displays the sample of secondary teachers who participated in the survey.

Table 2. Demographic information of the sample in the study.

		Count	Percentage			Count	Percentage
Gender	Male	69	32%	Years of Experience	Between 1 and 5 Years	32	15.02%
	Female	144	68%		Between 5 and 10 years	27	12.68%
Education	High School	5	2.35%		Employment status	More than 10 years	153
	Bachelor's degree	74	34.74%	Fixed-term		146	68.54%
	Master's degree	114	53.52%	Contract	67	31.46%	
	PhD	11	5.16%				
	Other	9	4.23%				

4.1. Ranking of School Culture Dimensions within a Performing PLC

Table 3 displays the mean responses of teachers from Parts B to F of the research survey. The means are presented in descending order.

Table 3. Decreasing order of school culture dimensions for a performing PLC based on teachers' responses.

School culture dimension (Parts of the survey)	Mean
Part B: Peer Collaboration	3.210
Part F: Reflective Dialogue	2.954
Part D: Collective Responsibility	2.698
Part C: Faculty Influence	2.589
Part E: De-privatized Practice	2.094
Dimensions average	2.712

The overall mean of the teacher's responses to all the questions/statements in the survey is 2.637, which is higher than 2.5, the median of the 4-point Likert scale. This indicates that most responses fall between "Agree/Sometimes/Most of them" and "Strongly Agree/Frequently/All of them." Consequently, this suggests that private schools in Mount Lebanon tend to adopt a school culture that promotes a collaborative PLC structure.

The dimensions of school culture for a high-performing PLC are ranked from the most to the least apparent in schools as follows: peer collaboration, reflective dialogue, collective responsibility, faculty influence, and de-privatization. The mean responses of teachers on the survey for each dimension, in decreasing order, are 3.210, 2.954, 2.698, 2.589, and 2.094. The average response to statements or questions related to de-privatized practices is below the median value of 2.5, indicating that this is the most critical area requiring improvement. Addressing this dimension is essential for private schools in Mount Lebanon to successfully adopt a high-performing PLC structure.

4.2. Relationship Between the School Culture Dimensions for a Performing PLC

Table 4 shows the correlation factor calculated for each of the hypotheses listed in the methodology section. The results indicate that there is a significant relationship among all five dimensions of school culture, as well as between each individual dimension and the overall school culture (Parts B, C, D, E, and F). The strength of these correlations ranges from moderate to very strong.

Table 4. Hypothesis testing results regarding the relationship between the five school culture dimensions for a performing PLC.

Research hypothesis / Null research hypothesis	Significance (2-tailed) p-value	Spearman's rho value	Interpretation
H1 / H01	0.000	0.468**	Moderate, positive, and significant correlation Accept H1 and reject H01
H2 / H02	0.000	0.371**	Weak, positive, and significant correlation Accept H2 and reject H02
H3 / H03	0.000	0.406**	Moderate, positive, and significant correlation Accept H3 and reject H03
H4 / H04	0.000	0.407**	Moderate, positive, and significant correlation Accept H4 and reject H04
H5 / H05	0.000	0.610**	Strong, positive, and significant correlation Accept H5 and reject H05
H6 / H06	0.000	0.575**	Moderate, positive, and significant correlation Accept H6 and reject H06
H7 / H07	0.000	0.559**	Moderate, positive, and significant correlation Accept H7 and reject H07
H8 / H08	0.000	0.571**	Moderate, positive, and significant correlation Accept H8 and reject H08

Research hypothesis / Null research hypothesis	Significance (2-tailed) p-value	Spearman's rho value	Interpretation
H9 / H09	0.000	0.495**	Moderate, positive, and significant correlation Accept H9 and reject H09
H10 / H010	0.000	0.403**	Moderate, positive, and significant correlation Accept H10 and reject H010
H11 / H011	0.000	0.609**	Strong, positive, and significant correlation Accept H11 and reject H011
H12 / H012	0.000	0.867**	Very strong, positive, and significant correlation Accept H12 and reject H012
H13 / H013	0.000	0.766**	Strong, positive, and significant correlation Accept H13 and reject H013
H14 / H014	0.000	0.688**	Strong, positive, and significant correlation Accept H14 and reject H014
H15 / H015	0.000	0.809**	Very strong, positive, and significant correlation Accept H15 and reject H015

Note: ** Correlation is significant at the 0.01 level (2-tailed).

The results show that the highest correlation values are between each of the dimensions and the overall school culture dimensions combined (H11 to H15). Additionally, Figure 2 illustrates the correlation coefficients for the relationships between individual dimensions, arranged in increasing order (H1 to H10).

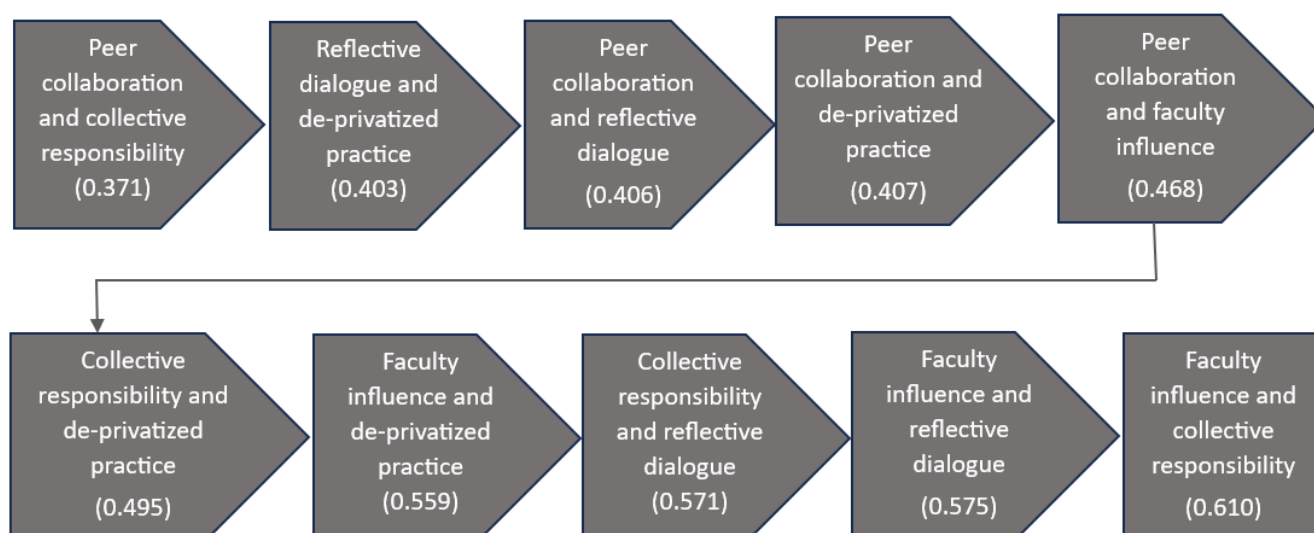


Figure 2. Increasing order of the correlation factors calculated between the individual dimensions of school culture for a performing PLC.

5. DISCUSSIONS

In this section, the results presented in the previous section are discussed.

5.1. School Culture Dimensions for a Performing PLC

One of the main aims of this study was to assess the readiness of private schools in Mount Lebanon to implement and adopt effective PLC structures by examining the schools' culture across five dimensions. Using descriptive statistics, the results indicated variations in how the school culture dimensions are perceived by teachers in the secondary cycle of private schools in Mount Lebanon.

The highest-ranked dimension was peer collaboration. This indicates that teachers rely on their relationships to overcome daily challenges. This collaborative spirit is a key source of support and motivation within schools. These results coincide with the findings of Newberry et al. (2018) in their research regarding the interactional dimensions of teacher change. In the Lebanese context, teachers have faced, in the past couple of years, currency devaluation,

displacement due to war, and political instability. To overcome the aforementioned challenges, they rely on each other to maintain the service they provide for the students. The results also coincide with the study conducted by El Achi, Jabbour Al Maalouf, Barakat, and Mawad (2025) across schools in Lebanon. The study emphasizes that collaboration enhances teacher performance during a crisis period. It is also an important element during financial situations when resources are limited. Kontar, Rizk, and Jabbour Al Maalouf (2025) also demonstrated in their findings that collaboration among teachers in private schools in Lebanon plays a vital role in ensuring a supportive environment and motivating teachers during economic and social instability. Peer collaboration is regarded as a form of professional learning and helps to sustain ongoing student learning, especially when the formal and official educational system is disrupted (Burns & Lawrie, 2015; Timperley, 2007).

The second-ranked dimension was reflective dialogue. The high ranking of this dimension is due to the fact that private schools in Lebanon utilize standardized testing for accreditation purposes, which is a requirement for private schools with international program divisions. This activity normalizes student record analysis and reflection meetings throughout the academic year (Taha & Thebian, 2025). On a national level, schools were required to develop school improvement plans. This practice was mandated by the Ministry of Education and Higher Education in Lebanon under the RACE II project. Consequently, teachers and principals engaged in regular reflection cycles (Ministry of Education and Higher Education (Lebanon), 2016; The World Bank, 2023). Reflective dialogue ranks second after peer collaboration, as data use is secondary; it builds on the collaboration between teachers (Van Geel, Visscher, & Teunis, 2017).

Respectively, collective responsibility and faculty influence are ranked in third and fourth place. The means of teachers' responses to the statements related to these dimensions are relatively close and above the mid-point, indicating that these dimensions are elements of strength in private schools in Mount Lebanon. Collective responsibility appears to be an element of strength because most schools in Lebanon express a clear ethos rooted in local cultural, religious, or community traditions (Frayha, 2003). This reflects the social and religious traditions among the teachers of a school or a group of schools, fostering a sense of belonging among them (Baytiyeh, 2017, 2019; Naddaf, 2014). Faculty influence is ranked fourth. This indicates that schools in Lebanon adopt a top-down structure, where principals and owners make strategic and significant decisions. The involvement of teachers in major decisions is limited (Akkary & Rizk, 2014; Berjaoui & Karami-Akkary, 2020; Shuayb, 2019). Although collective responsibility and faculty influence came after peer collaboration and reflective dialogue, they still reflect important strengths. Their ranking indicates that teachers are more engaged with peers than with the leadership team in schools, prioritizing relationships and practical classroom-level practices. Involving teachers in the decision-making process with the leadership team increases their motivation to improve their practices (Mokoena & Machaisa, 2018; Musengamana et al., 2024). This highlights an opportunity to improve the implementation of PLCs and support the well-ranked dimensions of school culture (Berjaoui, 2013; Dederling & Pietsch, 2025; Lomos, 2021).

Finally, de-privatized practices ranked last with a mean of 2.094 (less than the median), indicating that this dimension is a weakness point in private schools in Lebanon. This suggests that teachers' collaboration is primarily task-focused at the classroom level, including lessons, assessments, and students' behavior in class. This finding is attributed to the top-down leadership approach adopted by most schools in Lebanon, which limits teachers' ability to share freely (Berjaoui, 2013; Dederling & Pietsch, 2025; Shuayb, 2019). Moreover, private schools in Lebanon adopt an exam-driven culture, especially in the grades of national assessments (G9 and G12). Student performance in these national examinations is used as a marketing tool by schools to attract students. This culture encourages collaboration on practical tasks; however, it diminishes full trust, as teachers may compete for student outcomes, recognition, or promotions (Kontar et al., 2025; Schulz, 2005). However, trust between teachers is essential for them to collaborate, learn, and exchange ideas to face challenges and improve (Chen et al., 2018; Nguyen et al., 2023; Wang, 2016). This highlights a point of focus: time and proper planning are required to promote deep confidence and psychological safety among staff (Hernandez, Darling-Hammond, & Nielson, 2024; Newman, Donohue, & Eva, 2017).

5.2. Relationship among the School Culture Dimensions for a Performing PLC

The results show that there is a significant correlation between the individual dimensions of school culture promoting PLC structure (Figure 3). This indicates that the dimensions are interconnected and reinforce one another within private schools in Mount Lebanon, creating a coherent system rather than isolated practices. It also suggests that interventions at a dimensional level can have a domino effect. Peer collaboration provides the foundation for teachers to share student data and engage in reflective dialogue. Additionally, analyzing and discussing student data as a group clarifies common goals, thereby enhancing collective responsibility. Clear, shared, and reflective practices increase teachers' confidence in contributing to strategic decisions (faculty influence), provided that the leadership style permits it. Regular peer interactions and reflective practices over time would build mutual trust among teachers. This process would develop collaboration to be relational rather than task-focused (de-privatized practices) (Karen Seashore Louis, 2007; O'Connor, 2008; Shuayb, 2019; Stoll et al., 2006; Supovitz & Morrison, 2015).

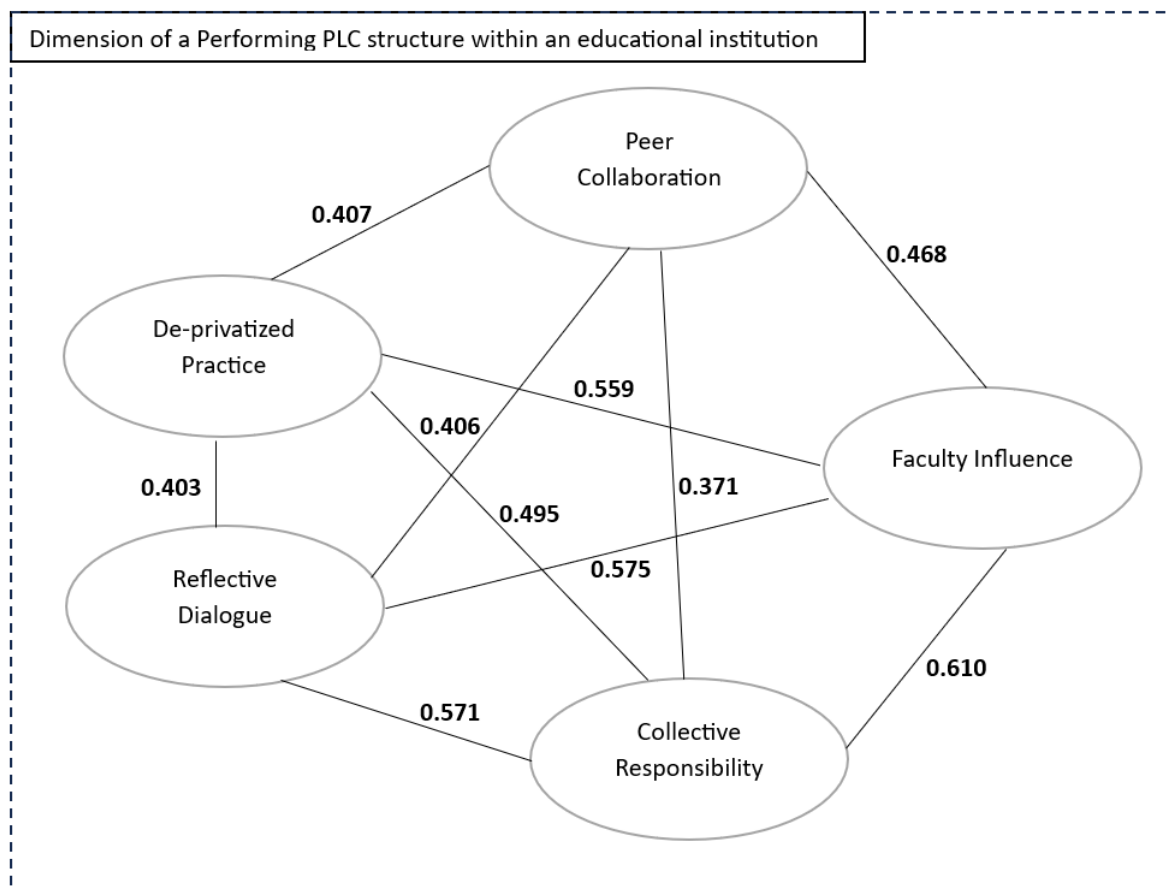


Figure 3. Values of the correlation factors between the individual dimensions of school culture promoting PLC structure.

The results also show strong and very strong significant positive relationships between individual dimensions and the school culture for a performing PLC structure (Figure 4). This statement aligns with the findings concerning the relationship tests among the various dimensions of school culture. It emphasizes that these dimensions are interconnected, and interventions targeting one dimension can influence the others. Recognizing this interconnectedness is crucial for designing effective strategies to enhance school culture comprehensively. This also aligns with Stoll et al. (2006) and Supovitz and Morrison (2015), who argue that the different attributes of a professional learning community work in harmony emphasize the importance of a comprehensive approach. In the context of private schools in Mount Lebanon, peer collaboration is a relative strength. The tested relationship indicates an opportunity to build on this strength to improve teachers' and leaders' engagement and to boost trust over time. These findings highlight the importance of addressing all dimensions simultaneously when implementing

a PLC structure in schools, rather than focusing on each dimension separately (DuFour et al., 2016; Hord & Huffman, 2010).

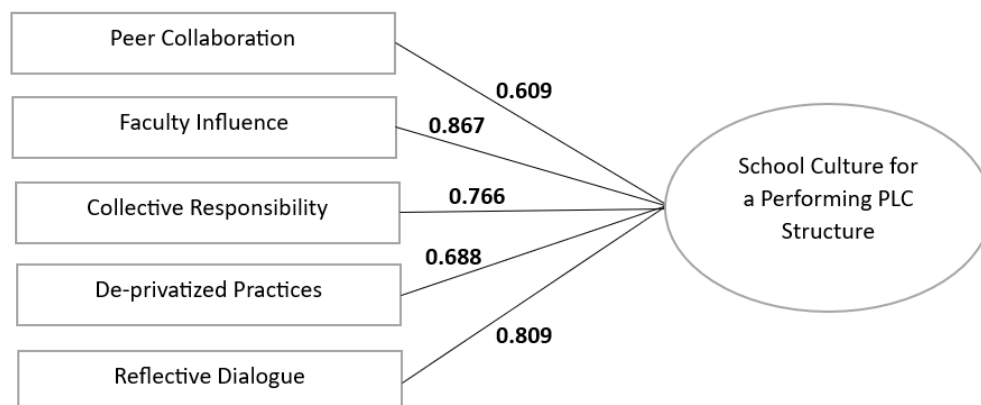


Figure 4. Values of the correlation factors between the dimensions and the school culture promoting the PLC structure.

6. CONCLUSION

This study offers a new perspective on how Professional Learning Communities (PLCs) function within the Lebanese private educational context. The findings of this research provide a comprehensive understanding of the school culture necessary for implementing professional learning communities in private schools in Lebanon. Peer collaboration ranked first, indicating a central role for peer interactions in providing support and fostering potential professional growth during Lebanon's period of instability. Reflective dialogue ranked second, demonstrating that teachers rely on and build upon discussions and analyses of student performance data. Collective responsibility and faculty influence ranked third and fourth simultaneously, revealing that schools exhibit coherence in their visions and hierarchical organization; however, teachers' involvement in strategic and major decisions remains limited. De-privatized practices ranked last, emphasizing that collaboration and reflective practices have not yet translated into fully open, psychologically safe school environments, which are essential for deeper professional learning. These findings highlight both the strengths and areas needing development within the Lebanese private sector to establish an effective PLC structure. Although PLCs are extensively studied internationally, limited research exists in Lebanon, a system characterized by exam-driven practices, resource shortages, and high dependency on the private sector.

The significant positive relationship between the dimensions and between each dimension and the overall school culture measure indicates that the dimensions are interconnected. An intervention at the dimension level tends to support improvements across the other dimensions. This interconnection underscores the importance of developing professional learning communities holistically. To establish effective communities, all dimensions peer collaboration, reflective dialogue, collective responsibility, faculty influence, and de-privatized practices must be addressed simultaneously.

Overall, this research presents both areas of strength to build on, such as peer collaboration and reflective dialogue, and areas of weakness, such as de-privatized practices and teacher agency, which are essential for the performance of professional learning communities and for long-term school improvement. At the policy level, the findings also highlight the importance of developing PLCs holistically rather than covering the dimensions separately. This research offers guidance to plan interventions regarding PLCs that fit the context of private schools in Lebanon. It contributes to a more global understanding of how PLCs function in diverse educational contexts.

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

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