Perceived Levels of School Climate, President Leadership, Professional Development, and University Teacher Leadership Competency in Public Universities in China

XIA Ji[1] ID, Mua'azam bin Mohamad[2] ID

[1] UUM College of Arts and Sciences, Email: summeraiai@126.com
[2] UUM College of Arts and Sciences. Emial: muaazam@uum.edu.my

*Corresponding Author: nirumala.rothinam@qiu.edu.my

ABSTRACT

This study examines the perceived levels of school climate, president leadership, professional development, and university teacher leadership competency in public universities in Shapingba District, Chongqing, China. Responding to increasing policy emphasis on leadership capacity building in Chinese higher education, the study establishes a descriptive baseline of key institutional and leadership-related constructs. A quantitative cross-sectional survey was administered to 375 university teachers, and descriptive statistical analyses were conducted to assess central tendencies and variability across constructs. The findings indicate that all four constructs were perceived at moderate to moderately positive levels, suggesting that supportive institutional conditions are present but not yet fully developed into transformative leadership and learning systems. By providing empirical clarity on the current state of leadership-related conditions, this study contributes to the limited descriptive literature on university teacher leadership in China and informs institutional planning, leadership development, and professional learning strategies in higher education.

Keywords: School Climate, President Leadership, Professional Development, University Teacher Leadership Competency, Chinese Higher Education.

INTRODUCTION

University teacher leadership has become an increasingly prominent focus in higher education reform, particularly in systems seeking to enhance teaching quality, institutional effectiveness, and innovation. Research in higher education consistently emphasizes that university teachers play a critical role not only in instruction but also in shaping learning cultures, supporting student development, and contributing to institutional improvement (Arthur, 2009; Reid, 2006). Within this broader reform agenda, leadership is increasingly understood as a distributed capacity embedded within academic practice rather than a function confined to formal administrative roles (Boyd, 2010).

School climate, president leadership, and professional development are widely recognized as critical contextual conditions shaping teachers' professional growth and leadership capacity. A supportive institutional climate encourages collaboration, reflective practice, and sustained engagement in teaching and learning, while leadership practices at the institutional level influence how academic staff experience autonomy, support, and accountability (Kember, 2000; Boyd, 2010). Professional development serves as a key mechanism through which universities translate institutional priorities into enhanced teaching practices and leadership capabilities, particularly when learning opportunities are embedded in everyday academic work (Hu, 2020; Trede, 2012).

Despite the conceptual importance of these constructs, empirical research describing their actual levels within higher education institutions remains limited, with many studies focusing instead on pedagogical approaches or professional learning outcomes. Existing literature highlights the need for more descriptive investigations that capture how teachers perceive leadership, professional development, and institutional conditions within their specific contexts (Arthur, 2009; Hu, 2020). Addressing this gap, the present study focuses exclusively on the question, which seeks to determine the perceived levels of school climate, president leadership, professional development, and university teacher leadership competency in public universities in Shapingba District, Chongqing, China.

LITERATURE REVIEW

This study examined the perceived levels of school climate, president leadership, professional development, and university teacher leadership competency in public universities in Shapingba District, Chongqing. The findings indicate that university teachers generally perceive these constructs at moderate to moderately positive levels, suggesting that foundational institutional supports and leadership structures are present but not yet fully developed into transformative systems. Such patterns are consistent with conceptualizations of teacher leadership as a distributed and context-dependent capacity that is shaped by institutional structures and professional agency (York-Barr & Duke, 2004; Nguyen et al., 2019).

When situated within the existing body of research, these findings reflect patterns that have been consistently reported in studies of higher education. Prior research indicates that while teacher leadership and professional engagement contribute to instructional coherence and professional learning cultures, their development is often constrained in centralized and hierarchical systems by limited decision-making autonomy and structural norms (Jian & Mols, 2019; Zhang et al., 2021). Similarly, studies on school climate suggest that higher education institutions frequently demonstrate supportive yet stability-oriented environments, where compliance and routine practices are prioritized over innovation and transformative change (Grant, 2019; Harris et al., 2019; Zhou et al., 2021; Aman Simaremare et al., 2023).

The bibliometric visualisations displayed in Figure 1 further consolidate the patterns identified in the preceding literature. The VOSviewer keyword co-occurrence network demonstrates that professional development and higher education function as central conceptual anchors, closely connected with themes of teaching, pedagogy, technology integration, self-efficacy, and professional identity. This clustering pattern reflects the literature's tendency to conceptualise leadership, professional learning, and institutional context as interrelated elements within higher education systems rather than as isolated constructs. At the same time, the country-level distribution of publications reveals a strong concentration of research output from China and other Asia–Pacific contexts, indicating heightened scholarly attention in regions experiencing rapid higher education expansion and reform. Despite this growing body of work, the visualisations also suggest that much of the existing research remains conceptually oriented or fragmented across thematic strands, with relatively limited emphasis on comprehensive descriptive profiling at the institutional level. Consequently, these bibliometric patterns reinforce the need for the present study, which responds directly to this gap by providing an empirical baseline of the perceived levels of school climate, president leadership, professional development, and university teacher leadership competency in public universities in China.

The VOSviewer keyword co-occurrence network visualizes the conceptual structure of the literature related to professional development, higher education, teaching, and leadership-related constructs. In the map, each node represents a keyword extracted from the selected publications, while the size of the node reflects the frequency with which the keyword appears in the dataset. Larger nodes, such as professional development and higher education, indicate dominant themes that occupy a central position in the research landscape. The links between nodes represent co-occurrence relationships, with shorter distances and thicker connections indicating stronger conceptual associations within the literature.

The visualization reveals several distinct but interconnected thematic clusters. The cluster centered on professional development is strongly linked with terms such as teacher education, educational technology, and technology integration, suggesting that professional development research in higher education is closely associated with pedagogical innovation and capacity building. Another cluster emphasizes teaching, students, lecturers, and university, highlighting the instructional and institutional context in which professional development is enacted. A further cluster incorporates terms such as pedagogy, training, self-efficacy, professional identity, and English-medium instruction, indicating a strand of research focused on teachers' psychological, instructional, and identity-related dimensions.

Overall, the network demonstrates that professional development functions as a conceptual hub linking pedagogical practice, institutional context, and individual teacher characteristics. The absence of isolated clusters

suggests that the literature treats these constructs as interrelated components of higher education systems rather than as independent domains. This pattern supports the rationale of the present study in examining professional development, leadership, and institutional conditions together when addressing descriptive research questions on higher education contexts.
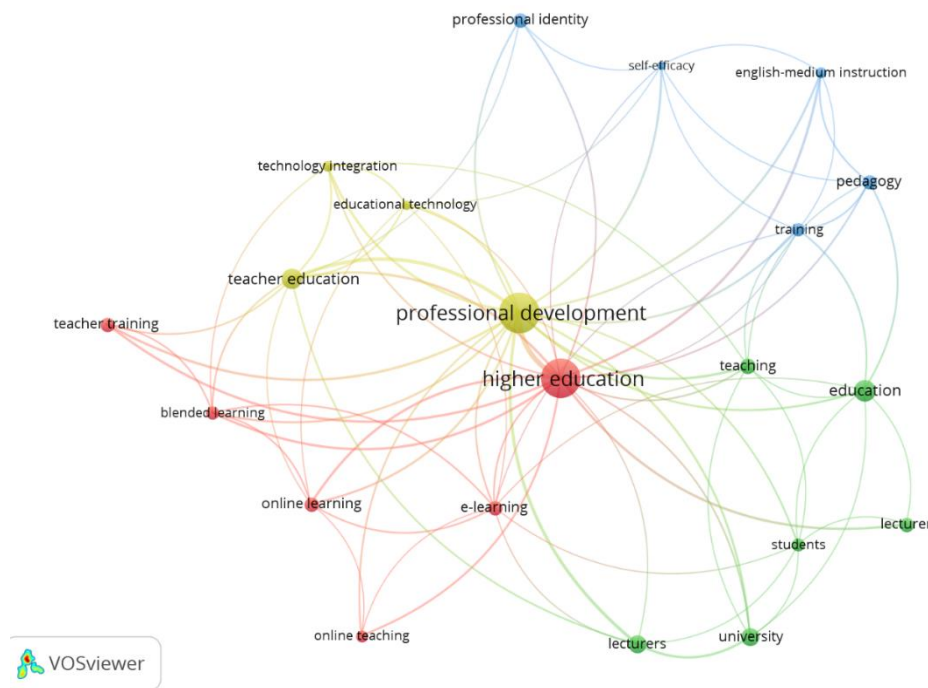

Figure 1: Bibliometric Visualisation

The documents-by-country chart shown in Figure 2 illustrates the geographical distribution of publications included in the dataset, highlighting national contributions to the research area. China emerges as the most prolific contributor, indicating strong scholarly engagement with issues related to professional development, higher education, and teaching practices within its higher education system. This dominance reflects both the scale of China's higher education sector and increasing policy emphasis on academic staff development and educational reform.

Malaysia appears as the second-highest contributor, followed by Australia and Hong Kong, suggesting that the Asia–Pacific region plays a prominent role in shaping contemporary research on professional development in higher education. Contributions from countries such as New Zealand, Thailand, the United Kingdom, Canada, Singapore, and the United States are present but comparatively smaller, indicating a more dispersed pattern of scholarly output across Western and Southeast Asian contexts.

This distribution suggests that research on professional development and related constructs is particularly active in systems undergoing rapid higher education expansion, internationalization, and pedagogical transformation. The strong representation of China and Malaysia provides important contextual justification for studies situated in Asian higher education environments. At the same time, the presence of multiple contributing countries indicates that the topic has global relevance, albeit with varying levels of research intensity. Collectively, the country distribution underscores the importance of contextualized, region-specific descriptive studies to complement the broader international literature.
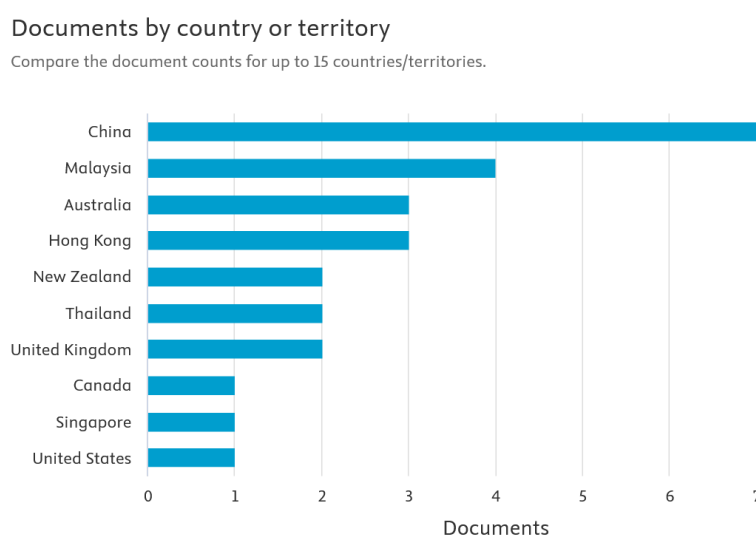
Documents by country or territory

Compare the document counts for up to 15 countries/territories.

Figure: The geographical distribution of publications

METHODOLOGY

Research Design

This study adopted a quantitative cross-sectional survey design, which was appropriate for addressing the descriptive objective of Research Question 1. The design enabled the systematic capture of university teachers' perceptions of school climate, president leadership, professional development, and university teacher leadership competency at a single point in time. Consistent with descriptive research purposes, the design aimed to establish an empirical baseline of institutional and leadership-related conditions prior to inferential or structural analysis.

Participants And Sampling

The participants comprised 375 university teachers drawn from public universities in Shapingba District, Chongqing, China. Respondents represented a range of academic disciplines, academic ranks, and professional backgrounds, thereby enhancing the representativeness of the sample within the district context. The sample size exceeded minimum recommendations for descriptive statistical analysis and ensured stable estimates of central tendency and dispersion across all measured constructs.

Instruments

Data were collected using a structured self-administered questionnaire consisting of four main sections, each measuring one of the study constructs.

School Climate was measured using a modified version of the School Level Environment Questionnaire (SLEQ). Five dimensions were included: resource adequacy, student support, affiliation, innovation, and participatory decision-making. These dimensions reflect widely used indicators of institutional climate in higher education and were adapted to suit the Chinese public university context.President Leadership was measured using a leadership scale operationalized along two dimensions: task-oriented leadership and people-oriented leadership. This conceptualization aligns with established leadership behaviour frameworks and reflects the dual focus on goal attainment, structure, and interpersonal support in higher education leadership contexts.Professional Development was measured as a multidimensional construct capturing university teachers' perceptions of access to, engagement in, and usefulness of professional learning opportunities. Items reflected contemporary views of professional development as continuous, collaborative, and embedded within academic practice.University Teacher Leadership Competency was measured using a multidimensional scale capturing teachers' perceived ability to influence pedagogical practices, contribute to institutional improvement, mentor colleagues, and support educational innovation beyond formal administrative roles.

All questionnaire items were measured using Likert-type scales, allowing for the calculation of composite scores and descriptive indicators for each construct and its dimensions.

Data Collection Procedure

Following institutional approval, questionnaires were distributed to university teachers through established administrative channels within participating public universities. Participation was voluntary, and respondents were

assured of confidentiality and anonymity. Completed questionnaires were collected and screened for completeness prior to data entry and analysis.

Data Analysis

Data analysis was conducted using SPSS. In line with the descriptive focus of Research Question 1, analyses were limited to descriptive statistics. Specifically, means, standard deviations, medians, and variances were computed to determine the perceived levels and variability of school climate, president leadership, professional development, and university teacher leadership competency. Results were presented using tables and graphical summaries to facilitate interpretation. No inferential or causal analyses were conducted at this stage.

RESULTS

This section presents the descriptive results of the study addressing Research Question 1, which examines the perceived levels of school climate, president leadership, professional development, and university teacher leadership competency in public universities in Shapingba District, Chongqing. Descriptive statistical analyses were conducted to summarise respondents' perceptions across all constructs, focusing on measures of central tendency and dispersion. The results are organised by construct and reported using tables and graphical summaries to provide a clear overview of response patterns. Collectively, these findings establish an empirical baseline of institutional and leadership-related conditions as perceived by university teachers, without inferring causal or predictive relationships.

University Teacher Leadership Competency

Table 4.1 to Table 4.3 present the descriptive statistics for the twenty-one items measuring University Teacher Leadership Competency (UTLC) among 375 respondents. All items were rated on a seven-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"). The mean scores for all UTLC items ranged narrowly between 3.94 and 4.01, while the corresponding medians were 4.00 for every item, indicating that respondents generally provided neutral-to-positive evaluations of their leadership capability. The sampling precision was high, with standard errors of the mean between .089 and .093, reflecting stable parameter estimates across the sample.

The standard-deviation values (1.72 – 1.79) and variances (approximately 2.95 – 3.23) reveal a moderate spread of responses, suggesting some individual differences in teachers' self-perceptions of leadership proficiency. Because the means and medians were closely aligned and the standard deviations were roughly similar for all items, the data distribution for UTLC can be regarded as symmetrical and homogeneous. This pattern implies that most participants tended to cluster around the scale's midpoint, with fewer respondents selecting extreme categories on either end. Modes ranging from 2 to 6 further confirm the presence of dispersed response tendencies across items, which is typical of large-sample self-assessment data.

Overall, the results show that university teachers in Shapingba District perceived themselves as reasonably competent in the leadership dimensions represented by the UTLC instrument, such as professional collaboration, ethical responsibility, data-informed decision-making, and capacity for innovation and school improvement. The average item means approaching 4.0 suggest that teachers neither undervalued nor overstated their leadership ability; rather, they acknowledged possessing an adequate level of leadership competence that can be further developed through institutional support and professional learning initiatives.

Table 4.1 summarises the descriptive statistics for the first set of University Teacher Leadership Competency items. The mean scores cluster closely around the midpoint of the scale, indicating neutral to moderately positive self-perceptions of leadership capability among respondents. The relatively consistent standard deviations suggest moderate variability in individual responses.

Table 4. 1 Descriptive Statistics Results of University Teacher Leadership Competency 1

Statistics										
		UTLC1	UTLC 2	UTLC 3	UTLC 4	UTLC 5	UTLC 6	UTLC 7	UTLC 8	UTLC 9
N		375	375	375	375	375	375	375	375	375
Mean		4.01	4.01	4.00	3.95	3.97	4.00	3.97	3.97	4.00
Std. Error of Mean		.092	.092	.090	.093	.092	.092	.090	.093	.092
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00

Mode	3a	4	3	2	3	3	2	2a	2
Std. Deviation	1.783	1.772	1.734	1.794	1.779	1.785	1.750	1.798	1.780
Variance	3.179	3.142	3.008	3.220	3.165	3.184	3.063	3.234	3.168

Table 4.2 presents the descriptive results for the second group of UTLC items. The findings show stable central tendencies across items, with means and medians closely aligned, reflecting consistent perceptions among respondents. The dispersion values indicate some individual differences but no extreme response patterns.

Table 4. 2 Descriptive Statistics Results of University Teacher Leadership Competency 2

		UTLC 10	UTLC 11	UTLC 12	UTLC 13	UTLC 14	UTLC 15	UTLC 16	UTLC 17	UTLC 18
N		375	375	375	375	375	375	375	375	375
Mean		3.98	3.99	4.01	3.98	3.97	3.95	3.98	3.98	3.95
Std. Error of Mean		.092	.093	.089	.090	.091	.092	.090	.089	.092
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		3	6	2	3	3	3	3	5	4
Std. Deviation		1.790	1.793	1.728	1.751	1.762	1.784	1.744	1.718	1.785
Variance		3.203	3.217	2.986	3.066	3.103	3.182	3.043	2.951	3.188

Table 4.3 reports the descriptive statistics for the final UTLC items. Mean scores remain close to the scale midpoint, reinforcing the overall pattern of moderate perceived leadership competency. The results confirm internal consistency across all UTLC items.

Table 4. 3 Descriptive Statistics Results of University Teacher Leadership Competency 3

		UTLC19	UTLC20	UTLC21
N		375	375	375
Mean		3.99	3.94	3.96
Std. Error of Mean		.092	.091	.092
Median		4.00	4.00	4.00
Mode		2	2a	2a
Std. Deviation		1.790	1.757	1.779
Variance		3.206	3.087	3.164

Professional Development

Descriptive statistics for the forty-seven items measuring Professional Development (PD) among 375 respondents are presented in Tables 4.4 to 4.9. The PD items were measured using a seven-point Likert scale ranging from 1 ("very small extent") to 7 ("very large extent"). The mean scores of individual items ranged from 3.92 to 4.04, with median values consistently recorded at 4.00. These central-tendency results indicate that respondents generally evaluated their professional development experiences at a neutral to slightly positive level. In other words, most university teachers perceived that professional learning activities were present in their institutions and somewhat beneficial, but not necessarily extensive or consistently impactful. The standard errors of the mean (ranging between .090 and .095) were relatively small, signifying stable and reliable estimates across the sample.

The standard deviations across the PD items ranged between 1.73 and 1.85, while variances fell within approximately 3.00 to 3.41, indicating a moderate dispersion of responses. This level of variation suggests that

although there is a shared perception among teachers about the general adequacy of professional development opportunities, individual experiences differ to some extent depending on factors such as departmental culture, leadership support, or workload constraints. The close alignment between mean and median values further confirms that the data distribution is approximately symmetrical, reflecting balanced responses without strong skewness or clustering at either extreme of the scale.

From a substantive perspective, these results imply that teachers in the surveyed universities perceive their professional development as available but relatively limited in depth, intensity, and institutional support. While items such as PD20, PD24, PD37, and PD47, which recorded mean scores slightly above 4.00, point to a recognition of active engagement in pedagogical reflection, curriculum development, and collegial collaboration, the narrow mean range overall suggests that such opportunities are not perceived as pervasive or transformational. Teachers appear to have access to professional learning initiatives but may regard them as routine rather than strategically integrated into institutional advancement. Meanwhile, items at the lower end of the range (e.g., PD16, PD17, and PD46) reveal that certain areas, such as research-based professional learning, technology integration, and community engagement, may not be systematically embedded in teachers' development experiences.

The findings also indicate a collective need for more structured and impactful professional development systems within the participating universities. Despite the presence of training activities, the relatively moderate scores suggest that such initiatives may not fully address teachers' evolving competencies in leadership, research innovation, or student-centred pedagogy. This observation aligns with prior research indicating that in many Chinese higher-education institutions, professional development tends to emphasize administrative compliance or short-term training rather than long-term growth and reflective practice (e.g., Yang & Li, 2020; Zhao, 2021). Accordingly, these results highlight the importance of leadership-driven strategies and institutional climates that foster sustained professional learning cultures.

From a methodological standpoint, the internal consistency reflected in these descriptive results is encouraging. The uniform distribution of means and variances indicates that the PD construct is likely to perform well in the measurement model assessment, with strong reliability and convergent validity expected. This homogeneity also implies that each PD indicator contributes meaningfully to the overall construct without excessive redundancy or multicollinearity. Consequently, the PD construct can be treated as a coherent latent variable representing teachers perceived professional learning engagement and institutional support for continuous competence enhancement.

The descriptive findings portray professional development among university teachers in Shapingba District as steady and institutionally supported, but not yet at a transformative level. While the presence of professional learning opportunities is widely acknowledged, their depth, personalization, and long-term impact may still require strengthening through improved leadership practices and more innovative school climates. Table 4.4 displays descriptive statistics for the first set of Professional Development items. The mean values indicate that respondents generally perceived professional development opportunities as moderately available. The similarity between means and medians suggests balanced response distributions.

Table 4. 4 Descriptive Statistics Results of professional Development 1

Statistics		PD1	PD2	PD3	PD4	PD5	PD6	PD7	PD8	PD9
N		375	375	375	375	375	375	375	375	375
Mean		3.99	3.98	4.02	4.01	4.01	4.02	3.98	3.98	3.99
Std. Error of Mean		.095	.090	.092	.093	.093	.093	.090	.091	.090
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		2	3	6	6	2a	2	5	2	5
Std. Deviation		1.832	1.747	1.781	1.805	1.804	1.803	1.733	1.772	1.737
Variance		3.356	3.053	3.173	3.257	3.254	3.251	3.005	3.139	3.019

Table 4.5 presents the descriptive results for the second PD item group. The findings reflect stable perceptions of professional learning experiences, with mean scores consistently near the midpoint. Variability across items remains moderate.

Table 4. 5: Descriptive Statistics Results of professional Development 2

		PD10	PD11	PD12	PD13	PD14	PD15	PD16	PD17	PD18
N		375	375	375	375	375	375	375	375	375
Mean		4.01	3.98	4.01	3.96	4.00	4.03	3.95	3.92	3.99
Std. Error of Mean		.093	.092	.090	.093	.092	.091	.091	.093	.094
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		6	2	3	2	3a	4	2	2	2
Std. Deviation		1.810	1.775	1.750	1.795	1.772	1.769	1.761	1.792	1.825
Variance		3.275	3.149	3.061	3.223	3.142	3.130	3.102	3.211	3.332

Table 4.6 summarises descriptive statistics for the third PD item cluster. Results indicate neutral to slightly positive perceptions of engagement in professional development activities. Response dispersion suggests differing individual experiences across departments or roles.

Table 4. 6: Descriptive Statistics Results of professional Development 3

		PD19	PD20	PD21	PD22	PD23	PD24	PD25	PD26	PD27
N		375	375	375	375	375	375	375	375	375
Mean		3.99	4.03	4.01	4.01	4.01	4.03	4.02	4.00	3.98
Std. Error of Mean		.093	.092	.093	.092	.091	.094	.091	.094	.093
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		5	4	5	6	4	6	4	6	5
Std. Deviation		1.792	1.786	1.799	1.784	1.760	1.811	1.769	1.829	1.797
Variance		3.211	3.189	3.238	3.184	3.096	3.280	3.128	3.345	3.230

Table 4.7 reports descriptive results for the fourth set of PD items. The mean scores suggest consistent perceptions of professional development support, while standard deviations indicate moderate variation among respondents.

Table 4. 7: Descriptive Statistics Results of professional Development 4

		PD28	PD29	PD30	PD31	PD32	PD33	PD34	PD35	PD36
N		375	375	375	375	375	375	375	375	375
Mean		4.01	4.02	4.01	4.01	4.00	3.99	3.99	3.95	4.01
Std. Error of Mean		.091	.093	.091	.093	.093	.095	.091	.094	.092
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		5	5	4	3a	5	4	4	2	2
Std. Deviation		1.761	1.799	1.771	1.809	1.792	1.847	1.753	1.827	1.775
Variance		3.102	3.235	3.136	3.273	3.211	3.412	3.072	3.338	3.150

Table 4.8 presents descriptive statistics for advanced and collaborative professional development activities. The findings indicate that respondents generally acknowledged the presence of such opportunities, although perceptions varied across individuals.

Table 4. 8 Descriptive Statistics Results of professional Development 5

		PD37	PD38	PD39	PD40	PD41	PD42	PD43	PD44	PD45
N		375	375	375	375	375	375	375	375	375
Mean		4.03	4.00	4.00	4.00	4.00	4.00	4.02	4.00	4.01
Std. Error of Mean		.092	.094	.093	.092	.093	.095	.092	.093	.091
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		6	2	6	4	3	5	4	5	3
Std. Deviation		1.790	1.813	1.796	1.786	1.804	1.840	1.790	1.792	1.767
Variance		3.202	3.286	3.227	3.190	3.254	3.385	3.203	3.211	3.123

Table 4.9 summarises the final PD items. Mean scores close to the scale midpoint suggest that these aspects of professional development are present but not strongly emphasized across institutions.

Table 4. 9 Descriptive Statistics Results of professional Development 6

		PD46	PD47
N		375	375
Mean		3.94	4.04
Std. Error of Mean		.094	.093
Median		4.00	4.00
Mode		3	5
Std. Deviation		1.823	1.792
Variance		3.325	3.210

School Climate

The descriptive statistics for the construct School Climate were analyzed across its five dimensions, resource adequacy, student support, affiliation, innovation, and participatory decision-making (table 4.10 - table 4.14).Overall, the results indicate that respondents perceived their institutional climate positively, with all items demonstrating mean values close to or above the midpoint of the five-point Likert scale (ranging between 3.98 and 4.89). This suggests a generally favorable perception of the working and learning environment among university teachers in the sampled public institutions.

For the Resource Adequacy (SC_RA) dimension, the mean values ranged from 3.98 to 4.89, indicating that respondents were generally satisfied with the sufficiency of institutional resources, teaching facilities, and administrative support. The highest mean score (4.89) was recorded for SC_RA1, which reflects respondents' strong agreement that their institutions provide sufficient instructional resources for effective teaching. The standard deviations, ranging from 1.762 to 1.822, show moderate dispersion, implying relative consistency in respondents' views regarding institutional resourcing.

The Student Support (SC_SS) dimension also showed encouraging results, with mean values between 3.98 and 4.84. The highest-rated item (SC_SS1, M = 4.84) highlights teachers' confidence that their institutions prioritize student welfare and engagement. The relatively low standard deviations (1.287 to 1.802) reflect consensus among respondents that support structures for students, such as counseling, guidance, and feedback systems, are reasonably well-developed. This suggests a healthy interaction between teachers and students within the learning ecosystem.

Regarding Affiliation (SC_AF), the mean values ranged from 3.98 to 4.86, indicating that university teachers generally feel a sense of belonging and collegiality within their departments. SC_AF1 recorded the highest mean (4.86), reflecting strong emotional attachment to their academic community and institutional identity. Standard deviations (1.197 to 1.832) suggest a high degree of agreement among respondents, consistent with the literature emphasizing the role of affiliation in enhancing teachers' organizational commitment and job satisfaction.

The Innovation (SC_IN) dimension yielded mean scores between 3.97 and 4.88, signifying that the universities under study encourage creative practices and pedagogical experimentation. The highest mean (4.88, SC_IN1) suggests that respondents recognize their institutions as supportive of new teaching methods and academic innovation. This aligns with the trend in Chinese higher education institutions emphasizing modernization, digitalization, and creativity in teaching practices. The relatively low standard deviations (1.301 to 1.832) further affirm a uniform positive perception toward innovative initiatives.

Finally, the Participatory Decision-Making (SC_DPM) dimension recorded mean scores between 3.98 and 4.83, illustrating that academic staff perceive a relatively high degree of involvement in institutional decision-making processes. The highest score (SC_DPM1, M = 4.83) demonstrates strong teacher agreement that their opinions are respected and considered in policy and administrative discussions. The consistency in the results, with standard deviations ranging from 1.269 to 1.831, indicates a generally shared perception of empowerment and inclusion in governance matters.

The findings reveal that university teachers in Shapingba district perceive their institutional climate as supportive, resourceful, innovative, and participatory. These results underscore the presence of a constructive educational environment that likely enhances motivation, collaboration, and teaching effectiveness. Such a positive school climate is theoretically consistent with organizational learning and social exchange perspectives, which posit that supportive and participatory environments foster higher teacher engagement and professional growth. Consequently, these favorable perceptions of school climate provide a strong contextual foundation for examining its influence on professional development and teacher leadership competency in subsequent analyses.

Table 4.10 presents descriptive statistics for the Resource Adequacy dimension of School Climate. The relatively high mean scores indicate positive perceptions of institutional resources and facilities. Low to moderate variability suggests general agreement among respondents

Table 4. 10 Descriptive Statistics Results of School Climate (Resource Adequacy)

Statistics								
		SC_RA1	SC_RA2	SC_RA3	SC_RA4	SC_RA5	SC_RA6	SC_RA7
N		375	375	375	375	375	375	375
Mean		4.89	3.99	4.03	3.98	4.00	4.00	3.98
Std. Error of Mean		.068	.092	.094	.091	.093	.094	.092
Median		5.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		5	5	6	5	6	6	3
Std. Deviation		1.312	1.783	1.822	1.762	1.808	1.816	1.790
Variance		1.722	3.179	3.320	3.104	3.270	3.297	3.203

Table 4.11 summarises the descriptive results for Student Support. The findings indicate that respondents generally perceive student support systems as adequate and functioning effectively. Response dispersion remains moderate.

Table 4. 11 Descriptive Statistics Results of School Climate (Student Support)

Statistics								
		SC_SS1	SC_SS2	SC_SS3	SC_SS4	SC_SS5	SC_SS6	SC_SS7
N		375	375	375	375	375	375	375
Mean		4.84	3.99	4.02	3.98	3.98	3.99	4.00
Std. Error of Mean		.066	.092	.092	.092	.090	.091	.093
Median		5.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		5	5	3	2	4	2	5
Std. Deviation		1.287	1.775	1.780	1.789	1.746	1.769	1.802
Variance		1.657	3.152	3.168	3.200	3.048	3.131	3.246

Table 4.12 reports descriptive statistics for the Affiliation dimension. The mean values suggest a strong sense of belonging and collegiality among university teachers. Variability across items is limited, indicating consistent perceptions.

Table 4. 12: Descriptive Statistics Results of School Climate (Affiliation)

Statistics								
		SC_AF1	SC_AF2	SC_AF3	SC_AF4	SC_AF5	SC_AF6	SC_AF7
N		375	375	375	375	375	375	375

Mean	4.86	4.00	4.03	3.98	4.02	3.99	4.02
Std. Error of Mean	.062	.093	.091	.095	.093	.093	.093
Median	5.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	5	5	5	2	2	2	6
Std. Deviation	1.197	1.803	1.772	1.832	1.802	1.793	1.799
Variance	1.432	3.251	3.138	3.358	3.246	3.217	3.235

Table 4.13 presents descriptive results for the Innovation dimension. Mean scores indicate positive perceptions of institutional encouragement for innovation and new practices. The data suggest moderate agreement among respondents.

Table 4. 13 Descriptive Statistics Results of School Climate (Innovation)

Statistics							
	SC_IN1	SC_IN2	SC_IN3	SC_IN4	SC_IN5	SC_IN6	SC_IN7
N	375	375	375	375	375	375	375
Mean	4.88	3.99	4.02	3.97	3.98	4.01	4.00
Std. Error of Mean	.067	.091	.092	.095	.091	.092	.091
Median	5.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	5	6	4	2	6	6	3
Std. Deviation	1.301	1.770	1.777	1.832	1.771	1.778	1.754
Variance	1.692	3.134	3.157	3.355	3.136	3.160	3.078

Table 4.14 summarises descriptive statistics for Participatory Decision-Making. The results indicate that respondents generally perceive themselves as involved in institutional decision processes, although some variation exists in individual experiences.

Table 4. 14 Descriptive Statistics Results of School Climate (Participatory Decision Making)

Statistics								
		SC_DMP1	SC_DMP2	SC_DMP3	SC_DMP4	SC_DMP5	SC_DMP6	SC_DMP7
N		375	375	375	375	375	375	375
Mean		4.83	3.98	4.00	3.99	3.99	4.02	4.04
Std. Error of Mean		.066	.093	.091	.093	.091	.092	.095
Median		5.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		5	2	4a	3	4	6	5
Std. Deviation		1.271	1.792	1.767	1.794	1.769	1.781	1.831
Variance		1.616	3.211	3.123	3.219	3.131	3.171	3.352

President Leadership

Descriptive statistics for President Leadership (PL), comprising Task-Oriented Leadership (PL_TO) and People-Oriented Leadership (PL_PO), are presented in Tables 4.15 to 4.19. Each subdimension was measured using multiple items on a seven-point Likert scale (1 = "strongly disagree" to 7 = "strongly agree"), with 375 valid responses analysed. Across the Task-Oriented Leadership dimension (Tables 4.15–4.17), the mean values ranged between 3.97 and 4.91, indicating a generally positive but not highly strong perception of task-oriented behaviors among university presidents. The highest mean (4.91 for item PL_TO10) implies that respondents perceive their presidents as particularly effective in planning and organizing institutional activities. In contrast, items with lower means (e.g., PL_TO18 at 3.97) suggest that while presidents show consistent direction and goal orientation, there remains variability in their implementation of specific task-related practices. The standard deviations (1.73–1.80)

and variances (2.98–3.25) indicate moderate dispersion, implying that most respondents share similar but not identical evaluations of leadership performance. The median and mode values (mostly 4.00) further reinforce the consistency of neutral-to-positive perceptions.

For People-Oriented Leadership, mean scores ranged from 3.97 to 4.04, signifying that presidents are perceived as generally considerate, communicative, and supportive toward staff. These values are consistent with those observed in the task-oriented dimension, reflecting a balanced leadership approach that integrates both goal achievement and human relations. Standard deviations (1.72–1.82) and variances (2.97–3.32) again suggest moderate variability, demonstrating that while most staff members perceive their presidents positively, a smaller portion may experience less interpersonal engagement or recognition. The uniform median of 4.00 across all items signifies consistent central tendencies, reinforcing that university presidents in Shapingba district maintain steady relational and managerial practices.

Overall, the results show that the presidents of public universities in Shapingba district exhibit balanced leadership behaviors, blending structured task execution with relational support. This equilibrium aligns with classical leadership frameworks such as Blake and Mouton's Managerial Grid and contemporary models of transformational–transactional leadership, both of which emphasize harmonizing productivity and human concern. The relatively consistent mean scores across both dimensions reflect a leadership climate conducive to institutional stability and faculty cooperation.

However, the findings also highlight opportunities for development. While presidents are perceived as maintaining order and providing guidance, the modest mean values (mostly around 4.00) imply that their leadership impact could be further enhanced through greater delegation, participatory communication, and motivational engagement. This is especially critical for fostering professional development and empowering academic staff to exercise leadership in their teaching, research, and administrative roles.

The descriptive statistics reveal that President Leadership among public university leaders in Shapingba district is perceived as functionally competent but moderately expressed. The data underscore that both task- and people-oriented behaviors are present and relatively balanced, providing a supportive foundation for subsequent inferential analyses examining how presidential leadership interacts with School Climate and Professional Development to influence University Teacher Leadership Competency.

Table 4.15 presents descriptive statistics for the first set of Task-Oriented Leadership items. The mean scores indicate moderately positive perceptions of goal-setting and organisational direction. Response variability remains moderate.

Table 4. 15 Descriptive Statistics Results of President Leadership (Task-oriented) 1

Statistics		PL_T O1	PL_T O2	PL_T O3	PL_T O4	PL_T O5	PL_T O6	PL_T O7	PL_T O8	PL_T O9
N		375	375	375	375	375	375	375	375	375
Mean		4.84	3.99	4.02	4.02	4.00	3.99	4.00	3.99	3.98
Std. Error of Mean		.068	.091	.093	.092	.091	.090	.091	.092	.089
Median		5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	5	6	4	4	3	2	2	3
Std. Deviation		1.316	1.759	1.793	1.775	1.758	1.747	1.763	1.781	1.729
Variance		1.732	3.093	3.216	3.152	3.091	3.051	3.107	3.174	2.989

Table 4.16 summarises the second group of Task-Oriented Leadership items. The results reinforce perceptions of structured leadership practices, with consistent central tendencies across items.

Table 4. 16 Descriptive Statistics Results of President Leadership (Task-oriented) 2

		PL_T O10	PL_T O11	PL_T O12	PL_T O13	PL_T O14	PL_T O15	PL_T O16	PL_T O17	PL_T O18
N		375	375	375	375	375	375	375	375	375
Mean		4.91	4.02	4.01	3.98	4.00	3.99	4.03	4.01	3.97

Std. Error of Mean	.067	.091	.091	.093	.092	.090	.090	.092	.089
Median	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	5	5	5	2	4	4	3	6	4
Std. Deviation	1.295	1.763	1.764	1.804	1.780	1.750	1.737	1.788	1.730
Variance	1.676	3.106	3.112	3.253	3.168	3.061	3.018	3.198	2.994

Table 4.17 reports the final task-oriented leadership items. Mean scores close to the midpoint indicate stable but moderate perceptions of leadership effectiveness.

Table 4. 17 Descriptive Statistics Results of President Leadership (Task-oriented) 3

		PL_TO19	PL_TO20
N		375	375
Mean		4.00	4.03
Std. Error of Mean		.091	.091
Median		4.00	4.00
Mode		4	4
Std. Deviation		1.771	1.756
Variance		3.136	3.085

Table 4.18 presents descriptive statistics for the first set of People-Oriented Leadership items. The findings suggest that respondents generally perceive presidents as supportive and communicative. Variability across responses is moderate.

Table 4. 18 Descriptive Statistics Results of President Leadership (People-oriented) 1

Statistics									
	PL_PO_1	PL_PO_2	PL_PO_3	PL_PO_4	PL_PO_5	PL_PO_6	PL_PO_7	PL_PO_8	PL_PO_9
N	375	375	375	375	375	375	375	375	375
Mean	4.03	4.00	3.99	3.97	4.03	4.02	3.99	4.00	4.01
Std. Error of Mean	.093	.092	.094	.092	.093	.092	.092	.093	.093
Median	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	2	6	6	5	6	4a	6	2	6
Std. Deviation	1.802	1.783	1.821	1.784	1.801	1.778	1.789	1.797	1.793
Variance	3.248	3.179	3.315	3.183	3.242	3.160	3.200	3.230	3.217

Table 4.19 summarises the remaining People-Oriented Leadership items. Mean scores remain consistent with earlier results, indicating balanced relational leadership practices.

Table 4. 19 Descriptive Statistics Results of President Leadership (People-oriented) 2

		PL_PO_10	PL_PO_11	PL_PO_12	PL_PO_13	PL_PO_14	PL_PO_15
N		375	375	375	375	375	375
Mean		3.97	4.04	4.01	4.00	4.02	4.02
Std. Error of Mean		.092	.091	.091	.094	.089	.092
Median		4.00	4.00	4.00	4.00	4.00	4.00
Mode		2	3a	6	2	5	6
Std. Deviation		1.790	1.763	1.758	1.813	1.723	1.790

Variance	3.205	3.108	3.091	3.286	2.970	3.206

Demographic Profile

As shown in Table 4.20 the gender distribution among the respondents is relatively balanced, with 194 females (51.7%) and 181 males (48.3%) participating in the survey. This nearly even representation ensures that gender-based perspectives are adequately reflected in the study's findings. The proportion of female participants slightly surpasses that of males, which aligns with the current demographic trend in many Chinese public universities, where female academics have become increasingly prominent in teaching and administrative positions.

The balanced gender representation enhances the validity of subsequent comparative analyses, such as the examination of whether male and female university teachers differ significantly in leadership competency, perceptions of professional development opportunities, or views toward school climate and presidential leadership. Previous research has shown that gender can influence leadership behaviour and professional engagement. Studies indicate that female educators tend to exhibit stronger collaboration, empathy, and participatory decision-making tendencies, whereas male educators are more likely to emphasize strategic, directive, or task-oriented leadership approaches (Eagly & Johnson, 1990; Eagly & Carli, 2003). Hence, the relatively balanced gender distribution in the present sample provides a solid foundation for exploring potential variations in leadership perceptions and professional engagement across gender groups. Furthermore, the findings suggest that the teaching workforce in the Shapingba district is progressing toward gender parity, reflecting broader efforts within China's higher education reforms to promote gender equality in academic professions. The representation of both genders in almost equal proportions ensures that the results of this study capture a holistic view of leadership dynamics, institutional culture, and developmental practices without gender bias.

Table 4. 20 Respondents' Gender Demographic Profile

		Frequency	Percent
N	Male	181	48.3
	Female	194	51.7
	Total	375	100.0

As shown in Table 4.21, the age distribution of respondents indicates that most participants were in the early to mid-career stages of their academic profession. Specifically, 37.9% of respondents were aged 30–36 years, followed by 30.4% within the 37–43 years range. Together, these two groups account for more than two-thirds of the total sample (68.3%), suggesting that the respondent population is largely composed of young to middle-aged lecturers and academic staff actively engaged in teaching and institutional development. Meanwhile, 16.0% were aged 44–50 years, and 6.4% were over 50 years old, representing more senior educators and administrators. The youngest age group, 23–29 years, constituted 9.3% of the respondents, likely representing early-career academics or new lecturers entering the university system.

The dominance of respondents aged between 30 and 43 reflects the demographic reality of Chinese public universities, where the expansion of higher education in the past two decades has led to the recruitment of younger faculty members to support teaching innovation, research output, and institutional modernization. This age distribution also implies that the majority of participants are in a professional stage characterized by active career growth, ongoing professional development, and increasing leadership responsibilities. Their perspectives are therefore particularly valuable for this study, as they are likely to be the most directly influenced by factors such as school climate, presidential leadership, and opportunities for professional development in shaping their leadership competencies.

Moreover, the presence of older faculty members (aged 44 and above, totaling 22.4%) provides balance and generational diversity within the dataset. These senior educators often possess more administrative experience and may contribute valuable mentorship and institutional memory. Their inclusion strengthens the robustness of the analysis by ensuring representation across different career stages.

Overall, the age distribution demonstrates that the sample is representative of a healthy academic workforce composition, blending youthful energy and innovation with seasoned expertise. This demographic pattern provides a meaningful foundation for subsequent analyses exploring whether age differences significantly affect perceptions of leadership, school climate, and professional development among university teachers in Shapingba district.

Table 4. 21 Respondents' Age Demographic Profile

		Frequency	Percent
N	23-29	35	9.3
	30-36	142	37.9
	37-43	114	30.4
	44-50	60	16.0
	>50	24	6.4
	Total	375	100.0

Marital Status

As presented in Table 4.22, most respondents were married with children, representing 63.2% of the total sample. This was followed by single respondents at 31.2%, while 5.6% of respondents were married without children. This distribution indicates that most participants are family-oriented individuals who balance professional and personal responsibilities, reflecting a mature and stable demographic composition within the academic workforce of public universities in the Shapingba district.

The predominance of married participants suggests that the respondent group largely comprises mid-career educators who have established family lives. This demographic pattern is typical within higher education institutions in China, where teaching positions often attract individuals seeking long-term career stability, social respectability, and work–life balance. The presence of a significant number of respondents with children also indicates that family commitments may play a role in shaping attitudes toward professional development, leadership engagement, and institutional participation. Teachers with family responsibilities might place greater emphasis on job security, supportive school climates, and flexible leadership that accommodates personal and professional growth simultaneously.

Meanwhile, the 31.2% of single respondents represent younger or early-career academics who are likely still in the process of developing their professional identity and leadership competencies. Their perspectives are valuable in understanding how emerging educators perceive opportunities for growth, mentorship, and institutional support. The smaller proportion of married respondents without children (5.6%) also adds nuance, as this group may reflect a transitional stage in career development where individuals prioritize professional advancement before assuming greater family responsibilities.

The marital status distribution shows a balanced and contextually realistic demographic structure of academic staff in Chinese public universities, dominated by married individuals with family obligations but inclusive of younger and unmarried teachers. This balance provides a comprehensive foundation for analyzing how family and social roles might intersect with leadership capacity, professional development participation, and perceptions of institutional climate and support.

Table 4. 22 Respondents' Marital Status Demographic Profile

		Frequency	Percent
N	Single	117	31.2
	Married with Children	237	63.2
	Married without Children	21	5.6
	Total	375	100.0

Highest Education Level

As shown in Table 4.23, the respondents' educational attainment demonstrates a well-diversified academic composition. The largest group of participants holds a bachelor's degree (30.7%), followed closely by those with a diploma (25.6%), master's degree (24.5%), and PhD (19.2%). This distribution reflects the heterogeneous qualifications of academic staff working in public universities within the study area, representing both early-career educators and highly qualified academic leaders.

The predominance of bachelor's degree holders suggests that a considerable proportion of respondents may be in the earlier stages of their academic careers, often transitioning from teaching-focused roles toward research-oriented and leadership positions. The relatively high number of diploma holders also indicates the inclusion of teaching and administrative personnel at vocational or applied universities, which are characteristic of China's higher education system's expansion and professional diversification. These individuals often possess strong pedagogical and technical expertise but may have limited exposure to formal leadership or research training.

On the other hand, the 24.5% of master's degree holders represent mid-level academics who have pursued further qualifications to enhance their professional competencies. This group often occupies key positions in

curriculum development, research collaboration, and departmental administration, contributing significantly to the overall institutional performance. The 19.2% of PhD holders underscores the presence of a solid core of highly educated individuals within the university system. This proportion is consistent with China's recent policy emphasis on strengthening the quality of university faculty through doctoral-level training and international collaboration (Ministry of Education of the People's Republic of China, 2023).

From a broader perspective, the educational profile of respondents aligns with the institutional push toward professional development and academic excellence. Higher educational attainment is often associated with enhanced research productivity, innovative teaching practices, and stronger leadership capacity (Zhou & Li, 2022). Therefore, the inclusion of a substantial number of master's and doctoral degree holders suggests that the universities under study are successfully cultivating an environment conducive to scholarly advancement and leadership growth.

The respondents' highest education levels illustrate a balanced academic ecosystem, combining practical experience and advanced academic training. This diversity enriches the understanding of how leadership, professional development, and institutional climate interact across varying educational backgrounds, ultimately shaping the development of teacher leadership competencies in Chinese higher education institutions.

Table 4. 23 Respondents' Highest Education Level Demographic Profile

		Frequency	Percent
N	Diploma	96	25.6
	Bachelor	115	30.7
	Master	92	24.5
	PhD	72	19.2
	Total	375	100.0

Income Level

Table 4.24 presents the demographic distribution of respondents' monthly income levels. The results show that the largest proportion (29.3%) of respondents earned between RMB 3,501 and 5,000, followed closely by 27.5% earning RMB 3,500 or below. Approximately 24.8% of the respondents reported earning RMB 5,001 to 6,500, while 12.5% earned above RMB 6,500 per month. Meanwhile, a small proportion (5.9%) did not disclose their income level.

This distribution indicates that the majority of respondents (56.8%) belong to the lower to middle-income bracket (≤ RMB 5,000). This aligns with the general salary structure of academic staff in Chinese public universities, where remuneration levels are typically standardized and modest, particularly for early- and mid-career lecturers. The smaller proportion of respondents in the higher-income brackets (≥ RMB 5,001) likely represents senior academics, department heads, or individuals who hold additional administrative or project-based responsibilities.

The income level distribution also provides valuable contextual insight for subsequent analyses. It enables examination of whether income differentials are associated with variations in University Teacher Leadership Competency (UTLC) as hypothesized in RQ2, which tests for significant differences across demographic factors. Given that leadership competency development often depends on exposure to professional development opportunities, resources, and institutional roles, all of which may correlate with income, the inclusion of income as a demographic variable is both theoretically and empirically justified.Overall, the income profile demonstrates a balanced sample representation across income categories, reflecting the socioeconomic diversity of university teaching staff within the Shapingba District's public universities.

Table 4. 24 Respondents' Income Level Demographic Profile

		Frequency	Percent
N	<=RMB 3500	103	27.5
	RMB 3501-5000	110	29.3
	RMB 5000-6500	93	24.8
	Above 6500	47	12.5
	Total	22	5.9

Years Of Working Experience

Table 4.25 presents the distribution of respondents based on their years of working experience in public universities within Shapingba District. The results show that 24.5% of the respondents have between 3 to 7 years

of teaching experience, representing the largest group. This is followed by 22.1% who have 1 to 3 years of experience, and 19.5% who have been teaching for 7 to 12 years. Meanwhile, 18.9% of the respondents reported having less than one year of experience, and 14.9% indicated having more than 12 years of experience.

The findings suggest that the sample is composed of a balanced mixture of early-career, mid-career, and senior academic staff, reflecting a healthy distribution across professional stages. The relatively high proportion of lecturers with 3 to 7 years of experience indicates that many respondents are in the developmental phase of their teaching careers, actively engaging in professional growth, leadership training, and institutional participation. This group is often in transition from basic teaching duties to assuming broader responsibilities such as curriculum development or departmental coordination, which are essential aspects of University Teacher Leadership Competency (UTLC).

Additionally, the presence of a smaller but notable proportion of highly experienced respondents (>12 years) provides valuable perspectives on institutional culture and leadership practices from a long-term academic engagement standpoint. Conversely, the 18.9% of novice lecturers (<1 year) bring insights into the challenges and expectations faced by newcomers entering higher education institutions, especially regarding the influence of school climate (SC) and president leadership (PL) on their professional adaptation and competency development.

Table 4. 25 Respondents' Years of Working Experience Demographic Profile

		Frequency	Percent
N	< 1 year	71	18.9
	1 – 3 years	83	22.1
	3 – 7 years	92	24.5
	7 – 12 years	73	19.5
	> 12 years	56	14.9
	Total	375	100.0

CONCLUSION

Taken together, the descriptive findings provide an overall picture of the institutional and leadership conditions currently experienced by university teachers in the study context. This study examined the perceived levels of school climate, president leadership, professional development, and university teacher leadership competency in public universities in Shapingba District, Chongqing. The findings indicate that university teachers generally perceive these constructs at moderate to moderately positive levels, suggesting that foundational institutional supports and leadership structures are present but not yet fully developed into transformative systems. Such patterns are consistent with research indicating that university teaching and leadership practices often operate within stable institutional frameworks that prioritise continuity over innovation (Kember, 2000; Reid & Reid, 2006).

When situated within the existing body of research, these findings reflect patterns that have been consistently reported in higher education literature. Prior studies have shown that while universities frequently provide formal structures for professional learning and leadership engagement, these structures may emphasise compliance and role fulfilment rather than active participation and leadership development (Arthur, 2009; Leask, 2015). Consistent with this perspective, the present findings suggest that although institutional conditions support routine teaching and professional activity, further effort is required to strengthen participatory leadership and deeper professional learning opportunities for academic staff (Reid & Reid, 2006; Trede, 2012).

Beyond confirming trends identified in prior research, the results carry important theoretical and practical implications for higher education leadership and professional development. The significance of this study lies in its contribution to the limited descriptive literature on university teacher leadership and its institutional context. By establishing an empirical baseline of school climate, president leadership, professional development, and teacher leadership competency, the study provides contextual grounding for understanding how university teachers experience leadership and professional growth within their institutions. From a practical standpoint, the findings offer insights for institutional leaders and policymakers seeking to enhance teaching quality and leadership capacity through more inclusive and participatory professional development approaches (Arthur, 2009; Trede, 2012).

Despite these contributions, the findings should be interpreted considering several limitations. First, the study relied on self-reported data, which may reflect individual perceptions rather than objective institutional conditions. Second, the cross-sectional design limits the ability to capture changes in leadership perceptions and professional development experiences over time. Third, the focus on public universities within a single district restricts the generalisability of the findings to other institutional or national contexts.

Building on these limitations, future research could extend the present study in several meaningful directions. Longitudinal research designs would allow for examination of how leadership competency, professional development, and institutional climate evolve over time. Comparative studies across regions or institutional types could further illuminate contextual differences in leadership experiences. In addition, qualitative approaches may provide deeper insight into how university teachers interpret and enact leadership, professional learning, and teaching roles in their daily academic practice (Kember, 2000; Trede, 2012).

REFERENCES

Arthur, L. (2009). From performance to participation: University teachers as leaders. Teaching in Higher Education, 14(4), 441–454. https://doi.org/10.1080/13562510903186709

Boyd, P. (2010). Becoming an academic: The experience of induction for new academic staff. The Professional Educator, 36(1), 9–24.

Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. The Leadership Quarterly, 14(6), 807–834. https://doi.org/10.1016/j.leaqua.2003.09.004

Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. Psychological Bulletin, 108(2), 233–256. https://doi.org/10.1037/0033-2909.108.2.233

Grant, C. (2019). Developing inclusive school climates in higher education. Higher Education Research & Development, 38(5), 1045–1059. https://doi.org/10.1080/07294360.2019.1598330

Harris, A., Jones, M., & Adams, D. (2019). Distributed leadership and school improvement: Leading or misleading? Educational Management Administration & Leadership, 47(5), 655–671. https://doi.org/10.1177/1741143218785131

Hu, S. (2020). Exploring the professional development of university teachers: Practices, challenges, and implications. Education + Training, 62(5), 615–635. https://doi.org/10.1108/ET-01-2020-0012

Kember, D. (2000). Misconceptions about the learning approaches, motivation and study practices of Asian students. Higher Education, 40(1), 99–121. https://doi.org/10.1023/A:1004036826490

Leask, B. (2015). Internationalizing the curriculum. Routledge.

Nguyen, D., Harris, A., & Ng, D. (2019). A review of the empirical research on teacher leadership. Educational Management Administration & Leadership, 47(1), 60–80. https://doi.org/10.1177/1741143217739352

Reid, A., & Reid, A. (2006). University teachers and the promotion of student learning. Higher Education, 51(1), 105–123. https://doi.org/10.1007/s10734-004-6383-8

Trede, F. (2012). Role of work-integrated learning in developing professionalism and professional identity. Asia-Pacific Journal of Cooperative Education, 13(3), 159–167.

Yang, X., & Li, M. (2020). Professional development of university teachers in China: Policies, practices, and challenges. Teaching in Higher Education, 25(7), 817–834. https://doi.org/10.1080/13562517.2019.1602754

Zhang, W., Liu, Y., & Chen, X. (2021). Leadership structures and teacher autonomy in Chinese universities. Studies in Higher Education, 46(6), 1181–1196. https://doi.org/10.1080/03075079.2019.1675623

Zhou, Y., Li, H., & Wang, Q. (2021). School climate and teacher engagement in Chinese higher education. Frontiers in Psychology, 12, 648–662. https://doi.org/10.3389/fpsyg.2021.648662.