



Professional Executives at Guangzhou University: Components, Model Validation, and Development Guidelines Administrative Leadership Competencies of Professional Executives at Guangzhou University

Ntapat Worapongpat

Eastern Institute of Technology Suvarnabhumi (EIT)

Corresponding Author E-mail: dr.thiwat@gmail.com ORCID ID: <https://orcid.org/0009-0008-3071-5249>

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Abstract

Background and Aim: Professional executives play a crucial role in ensuring effective governance, organizational performance, and sustainable development in higher education institutions. However, empirical studies that systematically identify and validate administrative leadership competencies of university executives in the Chinese higher education context remain limited. This study aimed to identify the core components of administrative leadership competencies of professional executives at Guangzhou University, validate a structural competency model through empirical analysis, and develop practical guidelines for executive development.

Materials and Methods: A mixed-method research design was employed. The quantitative sample consisted of executives and senior administrative staff at Guangzhou University in the 2023 academic year, selected through stratified random sampling. Qualitative data were obtained from purposive interviews with key informants and focus group discussions. Research instruments included semi-structured interview guides and a five-point Likert scale questionnaire. Data were analyzed using descriptive statistics, Confirmatory Factor Analysis (CFA), and thematic content analysis.

Results: The findings revealed four major components of administrative leadership competencies of professional executives: (1) Strategic Goal Setting, (2) Organizational Leadership, (3) Administrative and Structural Management, and (4) Organizational Engagement and Motivation. The validated model consisted of 20 indicators and demonstrated excellent construct validity and reliability. Based on the validated model, practical development guidelines were formulated to enhance leadership capacity, strengthen organizational systems, improve strategic planning, and promote engagement among university members.

Conclusion: This study provides a validated and comprehensive framework of administrative leadership competencies for professional executives at Guangzhou University. The findings contribute to both theoretical understanding and practical application of executive competency development in Chinese higher education institutions and offer valuable guidance for policymakers, university administrators, and human resource development units.

Keywords: Professional Executives; Administrative Leadership Competencies; Organizational Development; Confirmatory Factor Analysis; Higher Education Management

Introduction

Global higher education systems are undergoing profound transformation driven by technological advancement, internationalization, and increasing societal demand for highly skilled human capital (Good, 1973). These dynamics have compelled universities to move beyond traditional administrative practices toward more professionalized, strategic, and evidence-based governance models (Haruthaithanasan et al., 2024). As higher education institutions become more complex and competitive, the role of professional executives has emerged as a central determinant of organizational effectiveness, academic quality, and institutional sustainability.

In the Chinese context, national higher education reforms and the rapid development of the Guangdong Hong Kong Macao Greater Bay Area (GBA) have placed heightened expectations on universities in Guangzhou to modernize governance structures, enhance administrative efficiency, and align institutional missions with regional and national development strategies (Jing et al., 2024). Universities are increasingly required to operate as integrated organizations in which strategic planning, administrative systems, and human resource management function cohesively to support academic excellence and innovation. (Worapongpat, Kangpheng, 2025).





Professional executives occupy a pivotal position in translating institutional vision into operational outcomes. Prior research has consistently emphasized that effective university executives must demonstrate multidimensional competencies encompassing strategic goal setting, organizational leadership, administrative management, and the ability to engage and motivate organizational members (Jinlei et al., 2024; Tamanna et al., 2024). These competencies are particularly critical in comprehensive universities, where leaders must balance academic autonomy with administrative accountability while coordinating diverse stakeholders across complex organizational structures (Tianshu & Worapongpat, 2023).

Despite growing scholarly attention to leadership and governance in higher education, existing studies remain fragmented and often conceptual in nature. (Worapongpat, et. al., 2025). Many investigations focus on leadership styles or managerial behaviors without empirically validating integrated competency frameworks. (Worapongpat, et. al., 2025) Moreover, research that rigorously examines professional executive competencies within the specific institutional and governance context of Guangzhou University is notably scarce (Worapongpat, 2024a). The limited application of advanced analytical techniques, such as Confirmatory Factor Analysis, further constrains the empirical robustness and generalizability of prior findings.

Addressing these gaps, the present study seeks to (1) identify the core components of professional executive competencies at Guangzhou University, (2) empirically validate a structural competency model using Confirmatory Factor Analysis, and (3) develop evidence-based guidelines for strengthening executive development. By integrating quantitative and qualitative approaches, this research contributes to the advancement of leadership and governance scholarship in higher education and provides practical insights for policymakers and university administrators aiming to enhance executive professionalism and institutional performance within the Chinese higher education system.

Objectives

1.To identify and examine the core components of professional executive competencies at Guangzhou University.

2.To empirically validate the structural model of professional executive competencies using Confirmatory Factor Analysis.

3.To develop evidence-based guidelines for enhancing the professional performance and leadership effectiveness of executives at Guangzhou University.

Literature review

1. Professional Executives in Higher Education

The role of professional executives in higher education has gained increasing scholarly attention as universities confront rapid organizational, technological, and societal transformations. Modern universities are no longer solely academic institutions but complex organizations that require professionalized management systems and strategic leadership to achieve institutional sustainability (Worapongpat, 2024b). Professional executives differ from traditional administrators in that they are expected to integrate strategic thinking, organizational leadership, and evidence-based decision-making into their daily practices (Worapongpat, 2025a).

In the context of Chinese higher education, ongoing reforms and the pursuit of global competitiveness have intensified the demand for executives who possess advanced managerial capabilities, effective communication skills, and a strong commitment to institutional development (Worapongpat, 2025b). Empirical studies suggest that high-performing executives play a decisive role in shaping organizational effectiveness, ensuring effective policy implementation, and enhancing institutional reputation. (Worapongpat, 2026a). Consequently, professional executive competency has emerged as a critical construct for understanding university governance and performance.

2. Leadership Competencies in University Administration

Leadership competency frameworks in higher education commonly emphasize multidimensional capabilities, including strategic planning, interpersonal communication, organizational coordination, and team motivation (Worapongpat & Arunyananon, 2025). University executives are required to





manage academic and administrative units simultaneously, facilitate cross-functional collaboration, and inspire faculty and staff toward shared institutional goals.

Research indicates that leadership competencies such as emotional intelligence, conflict management, and collaborative leadership significantly contribute to institutional effectiveness and organizational cohesion (Worapongpat et al., 2024). Within Chinese universities, leadership models have increasingly shifted toward adaptive and participatory governance approaches, enabling executives to respond effectively to dynamic educational demands, policy reforms, and stakeholder expectations. These findings highlight leadership competency as a foundational dimension of professional executive performance.

3. Organizational Behavior and Executive Performance

Organizational behavior theories provide a theoretical foundation for understanding how executive actions influence motivation, engagement, and performance within universities (Worapongpat & Chayboonkrong, 2024). Classical and contemporary motivation theories, ranging from Herzberg's Two-Factor Theory to Deci and Ryan's Self-Determination Theory, emphasize the central role of leaders in fostering both extrinsic and intrinsic motivation among organizational members (Worapongpat et al., 2025).

Empirical evidence demonstrates that executives who establish supportive work environments, promote transparent communication, and encourage participatory decision-making are more likely to achieve higher levels of staff commitment and organizational performance (Worapongpat & Junsuk, 2024). This perspective is particularly relevant to Guangzhou University, where diverse academic and administrative units require executives capable of balancing coordination, autonomy, and engagement across organizational levels.

4. Organizational Structure and Institutional Effectiveness

The effectiveness of professional executives is closely linked to the organizational structures within which they operate. (Worapongpat, et. al., 2025). Organizational theory suggests that clear task allocation, well-defined communication channels, and functional alignment enhance operational efficiency and institutional stability (Worapongpat et al., 2024). Flexible and adaptive organizational structures further enable universities to respond effectively to innovation, policy reforms, and internationalization key drivers of contemporary Chinese higher education development (Xunan & Worapongpat, 2023).

Executives must therefore possess the competency to understand and manage both formal and informal organizational structures. (Worapongpat, et. al., 2026). Their ability to align administrative systems with strategic goals is critical for translating leadership vision into sustainable institutional outcomes.

5. Professional Development of University Executives

Professional development has become a prominent area of research and practice in higher education management. (Worapongpat, 2025) Universities worldwide have increasingly adopted systematic training programs, leadership academies, and competency-based development models to strengthen executive capacity (Yun & Worapongpat, 2023). Studies indicate that continuous learning, mentoring, and exposure to industry practices enhance executives' strategic capabilities and their ability to lead organizational transformation (Ye et al., 2024).

In the Chinese context, collaborations with industry partners and international institutions provide valuable opportunities for executives to acquire new skills, expand professional networks, and gain insights into global trends in university governance. These professional development mechanisms reinforce the importance of competency-based frameworks for guiding executive growth and institutional improvement.

6. Summary of Literature Gaps

Although existing literature underscores the importance of leadership competencies, organizational behavior, and professional development in higher education, several critical gaps remain. First, few studies have focused on an integrated and empirically validated competency model of professional executives within the specific institutional context of Guangzhou University (Zhou et al., 2024). Second, prior research has largely relied on conceptual discussions or descriptive analyses, with





limited application of advanced statistical techniques such as Confirmatory Factor Analysis to validate competency structures (Ziyia et al., 2024).

Addressing these gaps, the present study seeks to identify the essential components of professional executive competencies and empirically verify their structural validity within Guangzhou University. By doing so, the research contributes robust empirical evidence to the higher education leadership literature and provides a foundation for evidence-based executive development and governance reform.

Conceptual Framework

The conceptual framework of this study conceptualizes Professional Executive Competency as a higher-order construct composed of four interrelated first-order components: Strategic Goal Setting, Organizational Leadership, Administrative and Structural Management, and Organizational Engagement and Motivation. These components collectively influence Executive Performance, which in turn contributes to Institutional Effectiveness at Guangzhou University. The framework integrates empirical findings from Confirmatory Factor Analysis with established theories of strategic management, leadership, organizational behavior, and university governance.

Constructs and Definitions

Professional Executive Competency (Higher-order construct) refers to an integrated set of strategic, managerial, relational, and motivational capabilities required for effective governance and leadership in higher education institutions. This construct reflects an executive's ability to align institutional vision with operational execution while fostering organizational cohesion and performance.

Strategic Goal Setting denotes the executive's capacity to formulate, align, and operationalize long-term and unit-level goals using evidence-based decision-making and stakeholder participation.

Organizational Leadership refers to relational and transformational leadership capabilities, including trust building, team development, decision-making quality, conflict management, and innovation facilitation.

Administrative and Structural Management represents competencies related to designing, implementing, and adapting organizational structures, administrative systems, and digital governance mechanisms to ensure efficiency, transparency, and accountability.

Organizational Engagement and Motivation encompasses the executive's ability to promote participation, staff development, recognition, and intrinsic motivation among organizational members.

Outcome Variables include Executive Performance, reflecting short-term outcomes such as goal attainment, project completion, and stakeholder satisfaction, and Institutional Effectiveness, reflecting medium- to long-term outcomes such as improved governance quality, academic performance, and external collaboration.

Hypothesized Relationships

The framework proposes that each first-order component positively contributes to Professional Executive Competency, forming a multidimensional higher-order construct. Professional Executive Competency is hypothesized to positively influence Executive Performance, which subsequently enhances Institutional Effectiveness. In addition, selected competency components may exert direct effects on Executive Performance, indicating partial mediation effects. Contextual factors such as organizational size, party leadership structure, level of digital maturity, and intensity of external collaboration may moderate the strength of relationships within the model.

Measurement and Operationalization

Professional executive competencies are operationalized through 20 observed indicators, with five indicators assigned to each component. These indicators are measured using a five-point Likert scale ranging from strongly disagree to strongly agree. Outcome variables may be assessed using a combination of objective indicators, where available, and perceptual measures obtained from supervisors or organizational members.

Analytical Strategy

The empirical testing of the conceptual framework follows a staged analytical approach. Exploratory Factor Analysis may be conducted during initial instrument development. Confirmatory



Factor Analysis is applied to validate both a first-order model consisting of four correlated factors and a second-order model in which these factors load onto Professional Executive Competency. Model fit is evaluated using multiple indices, including χ^2/df , CFI, TLI, RMSEA, and SRMR, alongside assessments of factor loadings, construct reliability, and average variance extracted. Structural Equation Modeling is subsequently employed to test the hypothesized relationships among Professional Executive Competency, Executive Performance, and Institutional Effectiveness, including direct, indirect, and total effects. Where appropriate, multi-group CFA and moderation analyses may be conducted to examine contextual influences.

Theoretical Rationale

The framework is grounded in strategic management theory, which emphasizes the central role of goal setting in organizational performance; leadership and organizational behavior theories, which highlight the importance of relational competencies and motivation in mobilizing human capital; and public administration and university governance literature, which underscores the significance of administrative systems and organizational structures in translating leadership into institutional outcomes. Integrating these theoretical perspectives supports the conceptualization of executive competency as a multidimensional higher-order construct with downstream effects on performance and effectiveness.

Visual Representation

Figure 1 illustrates the conceptual framework, depicting Professional Executive Competency as a second-order construct composed of four first-order components and its hypothesized effects on Executive Performance and Institutional Effectiveness. Contextual moderators are shown as influencing the strength of structural relationships within the model.

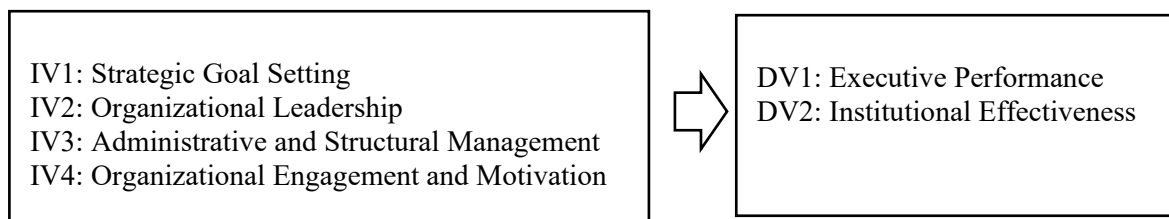


Figure 1 illustrates the conceptual framework of the study.

Methodology

Research Design

This study, entitled Professional Executives at Guangzhou University, employed a mixed-method research design to identify key components of professional executive competencies, empirically validate a structural competency model, and develop evidence-based guidelines for executive development. The research was conducted in three sequential stages: (1) development of the research framework and instruments, (2) implementation of quantitative and qualitative data collection and analysis, and (3) synthesis of findings and formulation of professional development guidelines.

Population, Sample, and Key Informants

Quantitative Phase

The population consisted of professional executives and senior administrative staff at Guangzhou University during the 2023 academic year, including vice presidents, deans, directors, and department heads. The sample size was determined using the criteria proposed by Krejcie and Morgan (1970). Stratified random sampling was employed to ensure proportional representation across administrative units and organizational levels.

Qualitative Phase

Key informants comprised seven experts in higher education leadership and university governance, selected through purposive sampling. All informants held senior executive or administrative positions and possessed extensive professional experience relevant to university governance and leadership development. Their perspectives provided in-depth contextual insights that complemented and enriched the quantitative findings.

Research Instruments



Three research instruments were utilized in this study.

First, a semi-structured interview guide was developed based on an extensive review of literature related to executive competency frameworks, higher education governance, and university management. Second, a five-point Likert scale questionnaire was constructed from themes identified through literature synthesis and preliminary content analysis. The questionnaire measured the four proposed competency components: Strategic Goal Setting, Organizational Leadership, Administrative and Structural Management, and Organizational Engagement and Motivation. Third, a focus group discussion protocol was designed to validate the competency model and to refine practical guidelines for executive development.

The instrument development process involved a comprehensive literature review, identification of key variables, item drafting and refinement, and expert validation to ensure content validity and clarity.

Data Collection Procedures

Data collection was conducted by the researcher. Quantitative data were collected through the administration of questionnaires to the selected sample of executives and administrative staff. Qualitative data were obtained through online or face-to-face semi-structured interviews with key informants, followed by focus group discussions to refine and validate the proposed guidelines. All interview and discussion data were audio-recorded with consent and transcribed verbatim for analysis.

Data Analysis

Quantitative data were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation, to describe executive competency levels. Confirmatory Factor Analysis (CFA) was subsequently applied to validate the structural model of professional executive competencies and to assess construct validity and reliability.

Qualitative data from interviews and focus group discussions were analyzed using thematic content analysis. The qualitative findings were used to triangulate the quantitative results, provide contextual interpretation, and inform the development of evidence-based guidelines for enhancing professional executive competencies.

Conceptual Framework

Based on the literature review and empirical analysis, the revised conceptual framework of professional executive competencies at Guangzhou University comprised four core components: Strategic Goal Setting, Organizational Leadership, Administrative and Structural Management, and Organizational Engagement and Motivation. These components served as the foundation for validating the competency model and for developing practical recommendations for executive development.

Results

1. Components of Professional Executive Competencies at Guangzhou University

The findings of this study identified four core components of professional executive competencies at Guangzhou University. These components were derived through an integrative process combining an extensive literature review, semi-structured interviews, and thematic analysis following Braun and Clarke's (2006) six-step approach. The four identified components are:

Strategic Goal Setting

Organizational Leadership

Administrative and Structural Management

Organizational Engagement and Motivation

Collectively, these components represent the key competency dimensions required for effective executive performance within the context of a modern comprehensive university in Guangzhou.

2. Qualitative Findings: Thematic Analysis

Semi-structured interviews were conducted with nine key informants, including senior executives, department directors, and administrative experts. The interview transcripts were systematically coded and analyzed to identify recurring themes and sub-themes related to professional executive competencies.





The qualitative analysis yielded a total of 20 competency variables, which were categorized under the four identified components. The inclusion of variables was determined based on three criteria: (1) frequency of occurrence in the interview data, (2) expert recognition at or above 50 percent, and (3) conceptual alignment with existing literature.

3. Integration of Literature Review and Qualitative Findings

The variables identified from the qualitative phase were integrated with findings from the literature review to refine and consolidate the competency framework. As a result, 20 competency indicators were finalized and subsequently used to construct a five-point Likert scale questionnaire for the quantitative phase of the study.

The research instrument was subjected to expert review to assess content validity, followed by reliability testing. The results indicated acceptable levels of internal consistency, with Cronbach's alpha coefficients meeting established methodological standards.

4. Confirmatory Factor Analysis of the Competency Model

Confirmatory Factor Analysis (CFA) was conducted to validate the proposed four-component competency model. The analysis included all 20 indicators across the four latent constructs: Strategic Goal Setting, Organizational Leadership, Administrative and Structural Management, and Organizational Engagement and Motivation.

The CFA results demonstrated that all indicators exhibited standardized factor loadings above the acceptable threshold, confirming strong convergent validity. The overall model showed a very good fit with the empirical data, as evidenced by commonly accepted goodness-of-fit indices.

In summary, the validated model comprises four core components and 20 indicators, reflecting a coherent and empirically supported structure of professional executive competencies at Guangzhou University.

Table with 4 columns: Fit Index, Recommended Criteria, Results, Interpretation. Rows include chi^2/df, CFI, TLI, GFI, AGFI, RMSEA, and SRMR.

Model Fit Summary

The CFA model has an excellent fit with the data and passes all evaluation indices. This means that the competency structure of senior management in Guangzhou accurately describes the data.

3. Factor Loadings of all 20 indicators.

1) Strategic Goal Setting



Indicator	Loading (λ)	Interpretation
SG1: Vision development	0.81	Strong
SG2: Strategic planning	0.85	Strong
SG3: Performance target setting	0.78	Acceptable
SG4: Long-term policy formulation	0.83	Strong
SG5: Evidence-based decision making	0.76	Acceptable

2) Organizational Leadership

Indicator	Loading (λ)	Interpretation
OL1: Academic leadership	0.80	Strong
OL2: Delegation & empowerment	0.77	Acceptable
OL3: Team management	0.84	Strong
OL4: Conflict resolution	0.72	Acceptable
OL5: Innovation leadership	0.79	Strong

3) Administrative and Structural Management

Indicator	Loading (λ)	Interpretation
AS1: Administrative coordination	0.82	Strong
AS2: Operational system management	0.74	Acceptable
AS3: Resource allocation	0.83	Strong
AS4: Policy implementation	0.78	Acceptable
AS5: Digital governance	0.80	Strong

4) Organizational Engagement and Motivation

Indicator	Loading (λ)	Interpretation
EM1: Communication effectiveness	0.79	Strong
EM2: Staff development support	0.81	Strong
EM3: Motivation strategies	0.76	Acceptable
EM4: Collaborative culture promotion	0.83	Strong
EM5: Stakeholder engagement	0.77	Acceptable

4. Construct Reliability (CR) \approx Average Variance Extracted (AVE)

Component	CR	AVE	Interpretation
Strategic Goal Setting	0.912	0.673	Excellent reliability & convergent validity
Organizational Leadership	0.899	0.642	Good
Administrative & Structural Management	0.915	0.681	Excellent
Organizational Engagement & Motivation	0.904	0.658	Excellent

Model Fit Summary

The results of the Confirmatory Factor Analysis (CFA) indicate that the proposed competency model demonstrates an excellent fit with the empirical data. All goodness-of-fit indices satisfied the recommended evaluation criteria, confirming that the competency structure of senior management at Guangzhou University adequately represents the observed data. These findings provide strong empirical support for the validity of the proposed professional executive competency framework.

Factor Loadings of the 20 Indicators

All 20 observed indicators exhibited standardized factor loadings ranging from acceptable to strong levels, indicating substantial relationships between the indicators and their respective latent constructs.





1. Strategic Goal Setting

The Strategic Goal Setting construct demonstrated strong measurement properties. All five indicators loaded significantly on the latent factor, with standardized loadings ranging from 0.76 to 0.85. Vision development ($\lambda = 0.81$), strategic planning ($\lambda = 0.85$), and long-term policy formulation ($\lambda = 0.83$) exhibited strong factor loadings, while performance target setting ($\lambda = 0.78$) and evidence-based decision-making ($\lambda = 0.76$) showed acceptable loadings. These results confirm that the indicators effectively capture the strategic dimension of executive competency.

2. Organizational Leadership

The Organizational Leadership construct was also well supported by the data. Standardized factor loadings ranged from 0.72 to 0.84. Academic leadership ($\lambda = 0.80$), team management ($\lambda = 0.84$), and innovation leadership ($\lambda = 0.79$) demonstrated strong loadings, while delegation and empowerment ($\lambda = 0.77$) and conflict resolution ($\lambda = 0.72$) showed acceptable loadings. These findings highlight the importance of leadership behaviors in defining professional executive competency.

3. Administrative and Structural Management

Indicators associated with Administrative and Structural Management displayed standardized factor loadings between 0.74 and 0.83. Administrative coordination ($\lambda = 0.82$), resource allocation ($\lambda = 0.83$), and digital governance ($\lambda = 0.80$) demonstrated strong loadings, whereas operational system management ($\lambda = 0.74$) and policy implementation ($\lambda = 0.78$) exhibited acceptable loadings. The results confirm that administrative and structural capabilities constitute a coherent and reliable competency dimension.

4. Organizational Engagement and Motivation

The Organizational Engagement and Motivation construct was supported by standardized factor loadings ranging from 0.76 to 0.83. Communication effectiveness ($\lambda = 0.79$), staff development support ($\lambda = 0.81$), and collaborative culture promotion ($\lambda = 0.83$) showed strong loadings, while motivation strategies ($\lambda = 0.76$) and stakeholder engagement ($\lambda = 0.77$) demonstrated acceptable loadings. These findings indicate that engagement and motivational competencies are integral components of executive effectiveness.

Construct Reliability and Convergent Validity

Construct reliability (CR) and Average Variance Extracted (AVE) values further confirmed the robustness of the measurement model. All constructs exceeded the recommended thresholds, with CR values greater than 0.70 and AVE values greater than 0.50. Strategic Goal Setting (CR = 0.912, AVE = 0.673), Administrative and Structural Management (CR = 0.915, AVE = 0.681), and Organizational Engagement and Motivation (CR = 0.904, AVE = 0.658) demonstrated excellent reliability and convergent validity, while Organizational Leadership (CR = 0.899, AVE = 0.642) showed strong measurement properties. These results indicate high construct validity and internal consistency across all components.

Summary of CFA Results

In summary, the CFA results confirm that all four components of the Professional Executive Competency model at Guangzhou University are statistically valid and reliable. All 20 indicators exhibited moderate to high factor loadings, demonstrating their effectiveness in measuring executive competency. The excellent model fit indices further indicate that the proposed model is appropriate for use as a foundation for developing evidence-based guidelines aimed at enhancing senior executive competency and institutional effectiveness.

Discussion

Objective 1: To identify the core components of professional executive competencies at Guangzhou University. Results from research objective 1 found that professional executive competency at Guangzhou University comprises four core components: Strategic Goal Setting, Organizational Leadership, Administrative and Structural Management, and Organizational Engagement and Motivation. These components were consistently identified through literature synthesis and qualitative thematic analysis and were supported by expert validation. This may be because modern comprehensive universities operate within complex governance environments that require executives to integrate





strategic, managerial, relational, and motivational capabilities simultaneously. Strategic Goal Setting provides direction and alignment with institutional and national development policies, while Organizational Leadership enables coordination across academic and administrative units. Administrative and Structural Management ensures operational efficiency and accountability, and Organizational Engagement and Motivation supports staff commitment and organizational sustainability.(Good, 1973).These findings correspond to strategic management theory, which emphasizes goal alignment and planning as foundations of organizational performance, as well as leadership and organizational behavior theories that highlight the role of relational leadership and motivation in mobilizing human capital (Ali, 2023) The results also align with prior studies in higher education leadership that identify executive competency as a multidimensional construct rather than a single managerial skill.

Objective 2: To validate the structural model of professional executive competencies.Results from research objective 2 found that the four-component competency model demonstrated strong empirical support through Confirmatory Factor Analysis. All 20 indicators exhibited acceptable to strong standardized factor loadings, and the model achieved excellent goodness-of-fit indices. Construct Reliability (CR) and Average Variance Extracted (AVE) values exceeded recommended thresholds, confirming both reliability and convergent validity.This may be because the competency indicators were developed through a rigorous process that integrated theoretical foundations, expert input, and empirical evidence. The use of CFA allowed for systematic testing of the hypothesized structure and provided statistical confirmation that the observed indicators accurately represent their underlying latent constructs. (Dongling, Worapongpat, 2023).These findings correspond to measurement theory and structural modeling principles, which emphasize the importance of empirical validation in confirming construct validity and model robustness. The results are consistent with previous research that advocates the use of CFA to validate leadership and competency frameworks in higher education contexts (Baashar, et. al., 2022)By empirically confirming the competency structure, this study advances beyond descriptive models and contributes a statistically validated framework to the literature.

Objective 3: To propose guidelines for enhancing the professional performance of executives at Guangzhou University.Results from research objective 3 found that the validated competency model provides a strong empirical foundation for developing evidence-based guidelines aimed at enhancing executive performance and institutional effectiveness. The findings suggest that strengthening strategic planning capacity, leadership development, administrative system management, and engagement-oriented practices can improve executive effectiveness at both individual and organizational levels.This may be because executive competencies directly influence decision-making quality, coordination efficiency, and staff motivation, which collectively affect organizational outcomes. When executives possess validated competencies and are supported through targeted professional development programs, universities are better positioned to implement strategic initiatives, adapt to policy reforms, and sustain long-term performance.These findings correspond to human resource development theory and university governance literature, (Cantú-Ortiz, et. al., 2020)which emphasize competency-based development, continuous learning, and systemic capacity building as key mechanisms for improving leadership effectiveness (Breckler, 1986).The proposed guidelines therefore represent a practical application of the validated model and offer actionable insights for executive development and governance reform at Guangzhou University.

Summary of DiscussionOverall, the discussion demonstrates that professional executive competency at Guangzhou University is a multidimensional construct that can be empirically measured and systematically developed. By aligning qualitative insights, CFA results, and theoretical perspectives, this study provides both conceptual and practical contributions to higher education leadership research and offers a validated framework for strengthening executive performance and institutional effectiveness.

Knowledge Contribution

The findings of this study on professional executives at Guangzhou University make significant contributions to both theoretical development and practical application in the field of higher education administration. The contributions can be categorized into three key dimensions: theoretical, empirical, and practical contributions (Figure 2).



Knowledge Contribution of the Study on Professional Executives at Guangzhou University

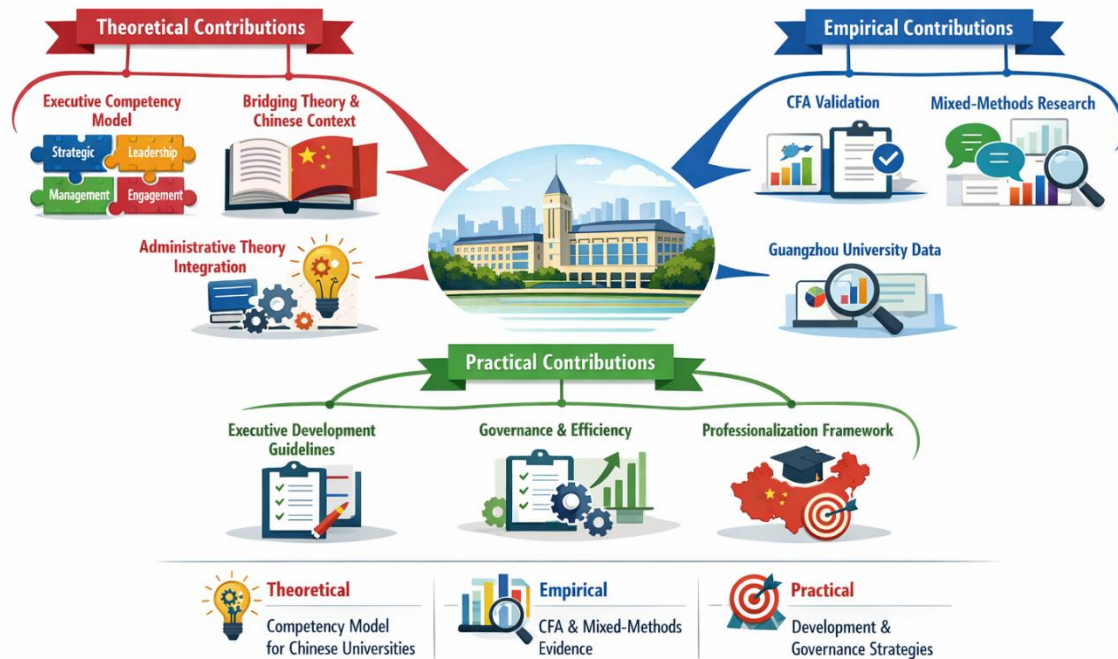


Figure 2. Conceptual Model of Professional Executives at Guangzhou University: Components, Model Validation, and Development Guidelines

1. Theoretical Contributions

1.1 Development of a Holistic Professional Executive Competency Model in Chinese Higher Education

This study proposes a four-component professional executive competency model comprising Strategic Goal Setting, Organizational Leadership, Administrative and Structural Management, and Organizational Engagement and Motivation. The model advances existing theories of administrative professionalism by integrating perspectives from modern university governance in China, leadership psychology, organizational behavior, strategic management, and public administration in higher education institutions.

Importantly, the model represents a novel theoretical contribution by bridging Western management and leadership theories with the distinctive governance characteristics of Chinese universities, such as collective leadership practices, dual governance structures, and mission-driven development strategies. As such, the framework offers a context-sensitive theoretical lens for understanding executive professionalism in Chinese higher education.

1.2 Bridging Administrative Theory and the Chinese University Context

Previous research in higher education administration has predominantly focused on leadership styles, management efficiency, or faculty development, while relatively few studies have examined professional executives as a distinct and critical group within comprehensive universities. This study contributes theoretical clarity by explicitly conceptualizing executive competency as a multidimensional construct linked to strategic governance, administrative modernization, organizational participation, and performance-oriented leadership in Chinese higher education institutions.

By articulating how executive competencies function within complex governance environments, this research strengthens the theoretical foundation for analyzing executive roles and responsibilities in contemporary universities.



2. Empirical Contributions

2.1 Empirical Validation of the Executive Competency Model Using CFA

A major empirical contribution of this study lies in the rigorous validation of the proposed competency model through Confirmatory Factor Analysis (CFA). The results demonstrate robust construct validity, strong reliability, and excellent goodness-of-fit indices for the four-component structure. These findings provide solid empirical evidence that professional executive competencies are measurable, quantifiable, and structurally coherent within the context of a major Chinese public university. This contribution addresses a key limitation in prior studies, which often relied on conceptual or descriptive approaches without empirical model validation.

2.2 Integration of Mixed-Methods Evidence

By integrating quantitative CFA results with qualitative insights obtained from senior executives and higher education experts, this study offers a comprehensive and triangulated understanding of professional executive competencies. The mixed-methods design enhances empirical depth by capturing both measurable competency structures and contextualized perceptions of executive practice. Such an integrated approach remains relatively uncommon in studies of Chinese university executives and significantly enriches the empirical literature on higher education leadership.

2.3 New Empirical Evidence from Guangzhou University

The study provides updated empirical data on executive practices at Guangzhou University, contributing new insights into leadership dynamics, organizational behavior, administrative structures, employee engagement, and strategic management practices within a large urban university in southern China. This regional and institutional context has been underrepresented in previous research, thereby extending the empirical scope of higher education administration studies.

3. Practical Contributions

3.1 Executive Development Guidelines for Guangzhou University

This study generates actionable, evidence-based guidelines that can be applied to executive selection, capacity building, professional development programs, administrative leadership training, and university–industry collaboration strategies. These guidelines directly support the modernization and professionalization of administrative systems at Guangzhou University.

3.2 Enhancing Organizational Performance and University Governance

The findings provide practical insights for universities seeking to strengthen evidence-based decision-making, improve administrative efficiency, foster cohesive organizational cultures, and enhance staff engagement and motivation. Moreover, the competency framework supports strategic reforms aligned with national higher education policies and institutional development goals.

3.3 A Framework for the Professionalization of University Executives in China

Beyond the case of Guangzhou University, the validated competency model offers a transferable framework that can be utilized by university administrators, human resource departments, policymakers, and leadership training institutions. The model can inform competency assessment systems, executive development pathways, and strategic interventions aimed at elevating the professional standards of university executives across China.

Conclusion

This study aimed to examine the professional competencies of executives at Guangzhou University, empirically validate the structural model of these competencies, and propose practical guidelines to enhance executive professional development. Employing a mixed-methods research design that integrated quantitative and qualitative data, the study produced a comprehensive and empirically validated framework for understanding and improving executive performance in higher education institutions in China. The findings indicate that professional executive competency at Guangzhou University comprises four core components: (1) Strategic Goal Setting, (2) Organizational Leadership, (3) Administrative and Structural Management, and (4) Organizational Engagement and Motivation. Together, these components form the foundation of effective administrative leadership and play a critical role in promoting sustainable organizational development. Confirmatory Factor Analysis (CFA) provided strong statistical evidence supporting the validity and reliability of the four-component model. The excellent model fit indices confirm that the identified competencies are coherent,





measurable, and empirically grounded, thereby strengthening the theoretical understanding of executive competency within the Chinese higher education governance context. Qualitative findings derived from expert interviews and focus group discussions further enriched the validated model. These findings highlight that successful university executives must integrate technical administrative expertise with interpersonal and relational leadership skills. In addition, effective executives are required to foster collaborative environments, encourage organizational participation, and maintain transparent communication across all levels of the institution. These insights reinforce the view that contemporary university leadership demands a holistic combination of strategic, operational, and relational competencies. Based on the empirical findings, this study also developed professional development guidelines aligned with national higher education reforms and the strategic priorities of Guangzhou University. The guidelines emphasize strengthening participatory leadership and employee engagement, establishing clear and actionable strategic goals, enhancing organizational communication and structural efficiency, and promoting collaborative networks with industry partners. Collectively, these recommendations provide actionable strategies for capacity building and performance enhancement among university executives.

In conclusion, this research makes significant theoretical, empirical, and practical contributions to the study of executive professionalism in higher education. The validated four-component competency model and the associated development guidelines offer a valuable framework for policymakers, university administrators, and professional development institutions seeking to advance administrative leadership in Chinese universities. The model aligns with contemporary governance principles in higher education and supports China's ongoing efforts to modernize university administration and enhance institutional competitiveness. Future research may extend this work by conducting comparative studies across regions and institutional types or by employing longitudinal designs to examine the long-term impacts of executive competency development initiatives.

Recommendation

Based on the findings of this study, several recommendations are proposed to enhance professional executive competencies at Guangzhou University. These recommendations aim to strengthen university governance, promote organizational performance, and support executive professional development in alignment with national higher education reform policies. The recommendations are organized into two main categories: recommendations for practice and recommendations for future research.

1. Recommendations for Practice

1.1 Strengthening Strategic Goal Setting

University executives should implement systematic and participatory strategic planning mechanisms that actively involve key stakeholders, including faculty members, administrative staff, and external partners. Such inclusive planning processes can help ensure that strategic goals are realistic, aligned with the university's mission, and broadly accepted across organizational units. In addition, regular review and evaluation processes should be established to monitor progress toward strategic objectives and to allow timely adjustments in response to changing internal and external conditions. The integration of data-driven decision-making systems is also recommended to ensure that strategic goals are grounded in empirical evidence rather than intuition alone.

1.2 Enhancing Organizational Leadership Capacity

Executive leadership development programs should be strengthened with a focus on modern university governance, conflict management, effective communication, emotional intelligence, and collaborative leadership. Establishing executive learning communities and peer networks is recommended to facilitate the exchange of practical experiences, encourage reflective leadership, and promote collective problem-solving. Furthermore, fostering a culture of trust, transparency, and shared responsibility can enhance team cohesion and contribute to a positive organizational climate.

1.3 Improving Administrative and Structural Management

Executives should regularly review and refine organizational structures to ensure clarity of roles and responsibilities, efficient workflows, and effective communication channels. Strengthening cross-departmental coordination through joint-task committees or project-based working groups can help





reduce operational redundancy and improve collaboration. The expanded use of digital governance and management systems is also recommended to enhance administrative efficiency, improve task tracking, and increase transparency across organizational units.

1.4 Fostering Organizational Engagement and Motivation

To strengthen organizational engagement, executives should implement comprehensive incentive systems that include both monetary and non-monetary rewards to recognize the contributions of faculty and staff. Participatory management practices should be promoted by involving organizational members in decision-making processes, particularly during policy formulation, curriculum development, and organizational change initiatives. Regular staff satisfaction surveys and feedback mechanisms should also be conducted to identify motivational challenges and enable timely and targeted interventions.

1.5 Strengthening University–Industry Collaboration

Universities should enhance collaboration with industry partners by establishing platforms for professional development, applied research, internship programs, and joint talent cultivation. Inviting industry professionals to serve as advisors can provide valuable practical insights that support executive decision-making and competency development. Long-term partnerships with enterprises are further recommended to enhance institutional engagement with society, strengthen the university’s reputation, and improve overall competitiveness.

2. Recommendations for Future Research

2.1 Comparative Studies Across Universities

Future research may conduct comparative analyses of professional executive competencies across different institutional contexts, such as universities in different regions, comprehensive versus specialized universities, or public versus private institutions. Such studies could reveal variations in governance models and leadership competencies across higher education systems.

2.2 Longitudinal Research Designs

Longitudinal studies that track executive competency development over time are recommended to examine how competencies evolve, how professional development programs influence performance, and which factors have the most sustained impact on executive effectiveness.

2.3 Expanded Mixed-Methods Approaches

Subsequent studies may adopt expanded mixed-methods designs by incorporating larger sample sizes, additional qualitative approaches (e.g., case studies or ethnographic methods), or multi-level modeling techniques. These approaches could provide deeper insights into executive behavior and organizational dynamics.

2.4 Evaluation of Professional Development Programs

Future research should investigate the effectiveness of specific executive development initiatives, such as leadership workshops, governance training programs, and industry immersion experiences, to identify best practices for enhancing executive capacity.

2.5 International and Cross-Cultural Research

Exploring international collaboration and cross-cultural leadership practices could provide valuable insights into how global best practices in university governance can be adapted to the Chinese context. Such research may also contribute to strengthening the global competitiveness and international engagement of Chinese universities, including Guangzhou University.

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