

# Contextualizing Distributive Leadership Measurement through Expert-Centric Validation in China's Private University Ecosystem

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## Abstract:

This study evaluates the validity of measuring Principal's Distributive Leadership in private universities in Henan, China, using the Content Validity Index (CVI). Valid measurement tools, like questionnaires, are crucial in research for accurate assessments. To ensure content validity, we employed a panel of five experts in educational management, leveraging their insights to refine the instrument. The study focused on three key dimensions of Distributive Leadership: Support, Supervision, and Cohesive Leadership Team. These constructs were evaluated using a 4-point relevance rating scale, known for its efficacy. Two types of CVI were utilized: the Scale-level Content Validity Index (S-CVI) and the Item-level Content Validity Index (I-CVI). Items scoring below 1.00 on the I-CVI or below 0.9 on the S-CVI were excluded from further analysis. The findings confirmed that the constructs reliably measure the targeted aspects of leadership, affirming strong content validity. Consequently, this instrument proves suitable for research into Principal's Distributive Leadership in private university settings. For future studies, additional validation steps such as construct validity and reliability tests are suggested to further substantiate the tool's effectiveness in exploring Principal's Distributive Leadership.

**Keywords:** Distributive Leadership; Content Validity Index, Validity Assessment; Educational Management; Private Universities.

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## 1. Introduction

In the evolving landscape of educational leadership, distributive leadership has emerged as a critical paradigm, emphasizing the distribution of leadership roles across various stakeholders within an educational institution [1]. This model contrasts with traditional leadership approaches, which often concentrate power and decision-making in the hands of a single leader, such as a principal [2]. By fostering a collaborative environment, distributive leadership promotes shared responsibility and active participation, which are vital for enhancing institutional effectiveness [3]. The importance of distributive leadership in today's educational settings cannot be understated, particularly in the context of private universities where unique challenges and organizational structures exist [4]. Leadership within such institutions often requires a nuanced approach, with emphasis on adaptability and collective decision-making to address specific needs and objectives [5]. Assessing the practice and impact of distributive leadership thus becomes imperative for understanding its efficacy and for guiding leadership development programs [6].

This study contributes to this dialogue by examining the content validity of an instrument designed to measure principals' distributive leadership in private universities located in Henan, China. The

development and validation of measurement tools are fundamental in educational research as they ensure the accuracy and relevance of the data collected [7]. Content validity, in particular, is crucial as it assesses whether an instrument adequately covers the domain of interest [8-9]. As Lawshe [10] highlighted, the use of expert panels to evaluate content validity is a widely recognized method, allowing for a comprehensive examination of the instrument's ability to measure what it is intended to. In our study, we employed the Content Validity Index (CVI), a robust method for determining the content validity of an instrument. Both Scale-level Content Validity Index (S-CVI) and Item-level Content Validity Index (I-CVI) metrics were utilized to refine the questionnaire, based on expert ratings. According to Polit, Beck, and Owen [11], a high score on the CVI indicates that the instrument's items are relevant and represent the construct well. Items that failed to meet the CVI thresholds were excluded from subsequent analyses, thereby reinforcing the instrument's validity. The theoretical foundation of this investigation is anchored in identifying key dimensions of distributive leadership [12], particularly in the unique context of educational institutions in Henan. The study focuses on three critical dimensions: Support, Supervision, and Cohesive Leadership Team, each pivotal to the functioning of distributive leadership [13]. Through a rigorous qualitative and quantitative analysis, the study aims to substantiate the instrument's capability to produce reliable and pertinent data. Ultimately, this research lays the groundwork for future studies poised to incorporate additional validation techniques such as construct validity and reliability testing. These further steps will enhance the tool's applicability and precision in exploring the facets of distributive leadership and its impact on educational settings [14]. By advancing the methodological rigor of measurement tools, this paper underscores the significance of valid and reliable instruments in academic research, fostering a deeper understanding of leadership dynamics within educational institutions and contributing to optimized leadership practices across the sector [15].

Distributive leadership is characterized by its emphasis on leadership practices that extend beyond the actions of any single individual, focusing instead on the interactions between staff, structures, and processes within an educational institution. This approach recognizes that leadership emerges from the dynamic interactions among organizational members rather than from formal positions of authority. Bolden further elaborates that distributive leadership offers a framework for understanding leadership as a complex, multi-agent process. The dimensions of distributive leadership, such as Support, Supervision, and Cohesive Leadership Team, are critical in assessing its practical impact [16]. These dimensions align with efforts to promote a shared responsibility among stakeholders to ensure effective school management and improvement. Ensuring the relevance and effectiveness of such a leadership approach requires rigorous instruments capable of accurately capturing these constructs. Measuring leadership constructs, particularly distributive leadership, poses significant methodological challenges. Leadership is inherently complex, encompassing various dimensions that can be difficult to quantify [17]. The development of measurement instruments necessitates a careful balance between theoretical frameworks and practical applicability. Valid and reliable instruments are crucial for assessing how leadership practices influence organizational outcomes. Instrument development often relies on psychometric properties such as validity and reliability. These properties ensure that the instruments accurately reflect the theoretical constructs they are intended to measure. Within this context, content validity is particularly vital [18], serving as the foundation upon which other forms of validity are established.

Content validity evaluates how well an assessment or measurement instrument encompasses the full range of the construct it aims to measure. It is critically important in ensuring that the instrument covers all relevant aspects of the construct, without extraneous elements or omissions. The Content Validity Index (CVI) is a widely used statistic in content validity evaluation, providing a quantitative measure of agreement among subject matter experts regarding the relevance of each item in an instrument. The CVI can be calculated at the item level (I-CVI) and the scale level (S-CVI). The I-CVI involves assessing the proportion of experts who rate an item as relevant, while the S-CVI represents the average of the I-CVIs across all items. Lawshe's method, which incorporates expert panel judgment to assess content validity, forms the basis for calculating the CVI. This method helps ensure that the instrument items adequately represent the dimensions of distributive leadership. Polit and Beck advocate for the use of this approach, noting its utility in evaluating the relevance and clarity of instrument items. The literature outlines the fundamental principles and practices of distributive leadership, highlights the complexities associated with measuring leadership constructs, and underscores the critical role of content validity [19]. As the instrument is developed to assess Principal's Distributive Leadership in private universities in Henan, China, ensuring high content validity through the CVI method will be instrumental. The synthesis of foundational theories and methodological insights will guide the development and validation process, ensuring robust and credible outcomes that accurately reflect the multifaceted nature of distributive leadership [20].

In the dynamic landscape of higher education, the role of leadership has become increasingly pivotal in driving institutional success and enhancing educational outcomes. Among various leadership styles, distributive leadership has emerged as a vital framework, emphasizing collaboration, shared responsibilities, and collective decision-making [21]. This leadership model not only enhances institutional adaptability but also fosters an inclusive culture where stakeholders are empowered to contribute to the university's mission and goals. As this model gains traction across educational settings globally, it becomes imperative to develop robust tools for evaluating distributive leadership [22], particularly in private universities where leadership structures may differ significantly from their public counterparts. The focus of this study is on the principled leadership practices within private universities in Henan, China, a region that has been witnessing rapid growth in private higher education institutions [23]. In these settings, the need for effective distributive leadership is pronounced, driven by the challenges and opportunities unique to private universities such as operational autonomy, competitive pressures, and the necessity for innovation. These contextual factors underscore the importance of having valid and reliable instruments to assess the state and efficacy of distributive leadership exercised by university principals.

To address this need, our research concentrates on evaluating the content validity of a principal's distributive leadership measurement tool. Content validity is a crucial precursor to establishing the overall validity of any instrument, ensuring that the tool fully captures the constructs it intends to measure [24]. This study employs the Content Validity Index (CVI), which is widely recognized for its systematic approach to determining the relevance and representativeness of each item within a measurement tool. A meticulously crafted instrument—typically in the form of a questionnaire—is invaluable for providing accurate data reflecting the quality and nature of leadership practices. In this context, we explore the dimensions of Support, Supervision, and Cohesive Leadership Team, pivotal

elements of distributive leadership. By deploying a panel of five experts in educational management, we ensured that these dimensions were scrutinized and refined for their relevance and comprehensiveness. The research utilizes both the Scale-level Content Validity Index (S-CVI) and the Item-level Content Validity Index (I-CVI) to rigorously evaluate the proposed instrument [25]. This dual approach helps in identifying and eliminating items that do not meet the predetermined thresholds of reliability, specifically items scoring below 1.00 on the I-CVI or below 0.9 on the S-CVI. This stringent vetting process ensures that remaining items accurately and reliably assess the constructs of distributive leadership.

The outcomes of this study not only affirm the content validity of the measurement tool but also highlight its suitability for application in private university settings within Henan, China. Moving forward, this research could serve as a baseline for future studies aiming to further solidify the instrument's validity and reliability by incorporating additional methodologies like construct validity checks and statistical reliability testing [26]. Such comprehensive validation strategies will enhance the tool's applicability across diverse educational contexts, thereby contributing significantly to the body of knowledge on distributive leadership in education.

## 2. Method

Content validity describes how well a measurement captures the concept it is meant to assess [27]. As noted by Polit and Beck [14], this validation primarily involves judgment and occurs in two stages. First, the scale's creator enhances content validity through domain analysis and careful conceptualization during item formulation. Subsequently, the content validity is further evaluated by experts. In this study, the Content Validity Index (CVI) was used to analyze and test the dimensions of Principal's Distributive Leadership—Support, Supervision, and Cohesive Leadership Team. The content validation process followed six steps, adapted from Yusoff: (1) drafting the content validation form, (2) selecting a panel of experts, (3) conducting content validation, (4) reviewing items and domains, (5) assigning scores to items, and (6) computing the CVI.

### 2.1. Drafting the Content Validation Form

Each expert reviewer should thoroughly understand the research, including its definitions, hypotheses, and overall objectives for using the instrument. Without familiarity with the study's conceptual framework, a review of the instrument could become disjointed or misguided [28]. Therefore, the use of a content validity form is essential. In this study, the relevance rating scale recommended by Davis was applied to assess content validity. The researcher provided expert reviewers with a validation form that outlined the research purpose, definitions, and scale measurements, as illustrated in Figure 1.

<p><b>Assessment Guide of Content Validation</b></p> <p>This inventory consists of teacher innovativeness with four dimensions, Openness to change, Creativity, Risk-taking Propensity and Flexibility among Henan private university of China. The items of the instrument will be provided on a 5-point Likert scale ranging from 1 strongly disagree to 7 strongly agree for the respondents after this process. Kindly offer an expert evaluation of the relevance of each item to the specified domains being measured. The evaluation should rely on the definitions and pertinent terminology outlined in the text. Please aim for objectivity and constructive comments in your review, utilizing the provided relevance rating scale.</p> <p><b>Degree of relevance:</b></p> <p>1=The item does not pertain to the measured domain 2=The item is moderately related to the measured domain 3=The item is highly relevant to the measured domain 4=The item is extremely relevant to the measured domain</p> <p>Please write the corresponding expert's consent level (1 to 4) in the space below "Expert Comments"</p>
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**Figure 1. Content Validation Evaluation**

Apart from the assessment criteria, this study addresses Principal's Distributive Leadership among Henan private university of China. It focuses on understanding how leadership responsibilities are shared among individuals in leadership positions, rather than being concentrated in the hands of a single principal [29]. Specifically, the study explores three critical dimensions of Distributive Leadership: Support, Supervision, and the Cohesive Leadership Team [30]. The dimension of "Support" relates to how principals distribute support functions among staff, fostering an environment that encourages collaboration and professional growth. This dimension is critical as it ensures that all team members feel valued and equipped to contribute to the institution's goals. It is measured through ten specific items (PDL1 to PDL10) within the study's framework. The "Supervision" dimension centers on the principals' role in overseeing educational processes and outcomes. Supervision is essential for maintaining high standards of teaching and learning, as well as ensuring accountability across different levels of the university. This aspect includes three items (PDL11 to PDL13), which aim to capture how effectively principals engage in supervisory practices. Finally, the dimension of the "Cohesive Leadership Team" focuses on the collaborative aspect of leadership where team unity and shared decision-making are emphasized. This dimension underscores the importance of cohesive teamwork, where leadership is not confined to individuals but is a shared responsibility, enhancing the institution's effectiveness in achieving its educational mission. It comprises ten items (PDL14 to PDL23) that evaluate the cohesiveness and collaborative nature of the leadership team. To measure these dimensions effectively, the study utilizes the Distributive Leadership Inventory (DLI), originally adapted from the work of Hester Hulpia, Geert Devos, and Yves Rosseel in 2009 [31]. This comprehensive inventory serves as a reliable tool to assess various aspects of distributive leadership, helping to provide insights into how leadership practices can be optimized to improve institutional performance and address specific challenges faced by private universities in Henan, China. All the items used in this study are detailed in Table 1, allowing for a clear understanding of how the leadership dynamics are measured and analyzed.

**Table 1. Form for content verification that represents the measured constructs**

Code	Tested items	Expert's Consent Level				Expert Comments
		1	2	3	4	
Support						
PDL1	My principal collaboratively develops a shared long-term vision with teachers.	1	2	3	4	
PDL2	My principal actively involves teachers in discussions about the private university vision.	1	2	3	4	
PDL3	My principal recognizes and celebrates achievements collaboratively with teachers.	1	2	3	4	
PDL4	My principal works together with teachers to provide necessary support and resources.	1	2	3	4	
PDL5	My principal engages in open dialogue with teachers, offering constructive feedback.	1	2	3	4	

PDL6	My principal collaborates with teachers outside school hours when needed.	1	2	3	4	
PDL7	My principal supports and promotes the well-being of teachers alongside them.	1	2	3	4	
PDL8	My principal encourages teachers to set and achieve their own professional learning goals.	1	2	3	4	
PDL9	My principal works with teachers to explore new practices aligned with their interests.	1	2	3	4	
PDL10	My principal facilitates and participates in opportunities for teacher collaboration.	1	2	3	4	
Supervision						
PDL11	My principal involves teachers in a shared evaluation process for professional growth.	1	2	3	4	
PDL12	My principal engages teachers in collaborative evaluation processes.	1	2	3	4	
PDL13	My principal works with teachers to provide formative feedback for improvement.	1	2	3	4	
Cohesive leadership team						
PDL14	My principal always ensures that teachers do functions for the university.	1	2	3	4	
PDL15	My principal always ensures teachers work in team.	1	2	3	4	
PDL16	My principal always shares university goals with teachers.	1	2	3	4	
PDL17	My principal always ensures that all teachers work in the same strain on the school's core objectives.	1	2	3	4	
PDL18	My principal always ensures that in our university the right teachers sit in the right place.	1	2	3	4	
PDL19	My principal always ensures that all teachers use their time properly.	1	2	3	4	
PDL20	My principal always ensures that all teachers have a clear goals.	1	2	3	4	
PDL21	My principal always ensures that all teachers know which tasks they have to perform.	1	2	3	4	
PDL22	My principal always ensures that all teachers are willing to execute a good idea.	1	2	3	4	
PDL23	My principal always ensures that all teachers are clear what they are authorized to do.	1	2	3	4	

Note(s): PDL = Principal's Distributive Leadership

## 2.2. Selecting a Panel of Experts

Since the study focused on teachers from private universities in Henan, China, five experts from three private universities in the province were selected. The selection criteria, as outlined by Rubio et al. [32], required experts to have relevant work experience in the same field. Specifically, the experts needed to hold a master's degree, possess the rank of associate professor, and have substantial experience in educational management or administration. An expert panel was convened to evaluate the components of the instrument and rate their relevance and representation within the content domain. The panelists assessed the clarity and relevance of the instrument's items concerning the construct and its dimensions, using a 4-point ordinal scale. Table 2 provides details of the experts involved in evaluating teacher innovativeness.

**Table 2. Relevance of Objectives of Teaching Subjects at the University**

No.	Domain expert	Organization	Experience
1	Associate Professor	Zhengzhou Sias University	11years
2	Associate Professor and Doctor	Zhengzhou Sias University	16 years
3	Associate Professor	Zhengzhou University of Finance and Economics	16 years
4	Professor and Doctor	Henan Open University	28 years
5	Professor	Henan Open University	25 years

Note(s): Experience in this study refers to the years engaged in educational management/administration.

## 2.3. Conducting Content Validation

This study utilized a synchronous content validity approach by supplying experts with a pre-prepared evaluation form. According to Yusoff, a non-face-to-face approach is highly effective when complemented by a well-organized follow-up system, as it improves both response rates and efficiency during expert validation. Initially, the researcher sent an invitation letter to assess the instrument via email and WeChat. Upon the experts' agreement to participate, the researcher provided a cover letter along with the evaluation form for assessing Principal's Distributive Leadership. The email also included a detailed explanation of the review process, scoring, and evaluation of the instruments.

## 2.4. Reviewing Items and Domains

According to Yusoff, experts are tasked with thoroughly evaluating both the items and their associated domains before assigning scores. They are encouraged to offer verbal or written feedback to enhance the items' relevance to the domain. All comments are meticulously reviewed during the refinement process for both the domain and its items. To minimize misunderstandings while completing the evaluation form, the researcher has provided contact numbers and email addresses.

## 2.5. Assigning Scores to Items

The content validity assessment employed a 4-point relevance rating scale, which asked experts to rate each item for relevance: 1 = not relevant, 2 = moderately relevant, 3 = highly relevant, 4 = extremely relevant. Utilizing a 4-point scale eliminates the neutral midpoint option, compelling experts to make a more definitive judgment about each item's relevance. This scale is noted for enhancing the precision of experts' ratings and reducing central tendency bias. Five experts were invited to provide their subjective evaluations of the instruments, which they submitted to the researcher. Following this, the researcher gave the expert panel a survey form and a comment form for the upcoming session. The experts were responsible for assessing the relevance and clarity of the study instrument's indicators, utilizing the scoring method shown in Figure 1, and submitting any open comments via the form outlined in Table 1. According to Davis, a relevance scale rating of 1 or 2 should be recorded as 0, while a score of 3 or 4 should be recorded as 1, indicating that ratings of 3 or 4 reflect suitable items.

## 2.6. Computing the CVI

The Item-Content Validity Index (I-CVI) was determined by dividing the number of experts who rated an item with a 3 or 4 by the total number of experts. An I-CVI of 0.78 or higher was considered acceptable for retaining an item, based on Lynn's recommendations. In parallel, the Scale-Content Validity Index (S-CVI) assessed the overall validity of the scale using both the S-CVI/Ave (average of the I-CVIs across all items) and the S-CVI/UA (universal agreement) methods, as outlined by Polit & Beck. An S-CVI/Ave of 0.90 or above was considered satisfactory. According to Lynn [33], researchers often calculate two types of Content Validity

Indices (CVIs) to evaluate research objectives. The first is the Item-Content Validity Index (I-CVI), which is determined by calculating the percentage of experts who assign a rating of 3 or 4 and then dividing that by the total number of experts [14]. The second category is the Scale-Content Validity Index (S-CVI), which reflects the percentage of items in an instrument that receive a rating of either 3 or 4 from the entire panel of content experts. Polit et al. provided widely accepted guidelines for the I-CVI relative to the number of experts, suggesting that when the panel consists of three to five experts, the I-CVI threshold should be 1.00. This signifies complete agreement among all experts on the item's content validity. Consequently, any item with an I-CVI below 1.00 needs to be excluded from the questionnaire, as this study involved five experts. The criteria for the acceptable cutoff value are detailed in Table 3.

**Table 3. Comparison of Total Experts with the Cutoff Value**

Number of experts	Acceptable CVI	References
3 to 5 experts	Should be 1	Polit et al. (2007)
At least 6 experts	A minimum of 0.83	Polit et al. (2007)
6 to 8 experts	A minimum of 0.83	Lynn (1986)
More than 8 experts	A minimum of 0.78	Lynn (1986)

### 3. Results And Discussion

This study investigated the validity of four dimensions of teacher innovativeness in private universities in Henan, China: openness to change, creativity, risk-taking propensity, and flexibility. To assess the level of agreement among experts on each item, the evaluation scores provided by the experts were consolidated. The Item Content Validity Index (I-CVI) was calculated using the formula of agreed-upon items divided by the number of experts, as described by Polit & Beck. The Scale Content Validity Index (S-CVI) is derived from the total I-CVI score. There are two methods for calculating the S-CVI: the Universal Agreement (S-CVI/UA), which should be at least 0.80 according to Davis, and the Average (S-CVI/Ave), which requires a value of 0.90 or more. Polit and Beck recommended the S-CVI/Ave method as more effective, noting that the universal agreement standard is too strict, particularly with a large panel of experts. Detailed evaluations by the experts are presented in Tables 4, 5, 6, and 7.

**Table 4. Relevance Rating on the Scale for Support**

Item	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert Agreement	I-CVI	UA
PDL1	1	1	1	1	1	5	1	1
PDL2	1	1	1	1	1	5	1	1
PDL3	1	1	1	1	1	5	1	1
PDL4	1	1	1	1	1	5	1	1
PDL5	1	1	1	1	1	5	1	1
PDL6	1	1	1	1	1	5	1	1
PDL7	1	1	1	1	1	5	1	1
PDL8	1	1	1	1	1	5	1	1
PDL9	1	1	1	1	1	5	1	1
PDL10	1	1	1	1		5	1	1
						S-CVI/Ave	1	
	1	1	1	1	1	S-CVI/UA		1
Proportion Relevance: The average percentage of items rated as relevant by the five experts							1	

Note(s): I-CVI = Number of Agreements / Total Number of Experts; UA = Universal Agreement; S-CVI = Sum of the I-CVIs

**Table 5. Relevance Rating on the Scale for Supervision**

Item	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert Agreement	I-CVI	UA
PDL11	1	1	1	1	1	5	1	1
PDL12	1	1	1	1	1	5	1	1
PDL13	1	1	1	1	1	5	1	1
						S-CVI/Ave	1	
	1	1	1	1	1	S-CVI/UA		1

Proportion Relevance: The average percentage of items rated as relevant by the five experts	1	
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Note(s): I-CVI = Number of Agreements / Total Number of Experts; UA = Universal Agreement; S-CVI = Sum of the I-CVIs

**Table 6. Relevance rating on the Scale for Cohesive leadership team**

Item	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert Agreement	I-CVI	UA
PDL14	1	1	1	1	1	5	1	1
PDL15	1	1	1	1	1	5	1	1
PDL16	1	1	1	1	1	5	1	1
PDL17	1	1	1	1	1	5	1	1
PDL18	1	1	1	0	1	4	0.8	0
PDL19	1	1	1	1	1	5	1	1
PDL20	1	1	1	1	1	5	1	1
PDL21	1	1	1	1	1	5	1	1
PDL22	1	1	1	1	1	5	1	1
PDL23	1	1		1	1	5	1	1
						S-CVI/Ave	0.98	
	1	1	1	0.9	1	S-CVI/UA		0.9
Proportion Relevance: The average percentage of items rated as relevant by the five experts							0.98	

Note(s): I-CVI = Number of Agreements / Total Number of Experts; UA = Universal Agreement; S-CVI = Sum of the I-CVIs

As shown in Tables 4, 5, and 6, Principal's Distributive Leadership was evaluated across three dimensions: Support, Supervision, and Cohesive Leadership Team. The assessment indicated that the S-CVI/Ave exceeded 0.90, meeting the required criteria, and thus the scale achieved the desired level of content validity. However, one item (PDL18) had to be removed because its I-CVI score was below the threshold of 1.00. After removing this item, the I-CVI reached satisfactory levels. This indicates that the constructs of Principal's Distributive Leadership—including Support, Supervision, and Cohesive Leadership Team—demonstrated strong content validity in assessing the extent of Principal's Distributive Leadership among private universities in Henan, China. Ensuring the overall validity of an assessment is critical, with content validity being a key component. This research introduced an evidence-based and systematic approach for conducting comprehensive content validation. Empirical data from expert evaluations of educational management in private universities in Henan, China, were utilized to calculate the Content Validity Index (CVI) using this instrument, establishing a basis for future studies. Additionally, following this expert evaluation phase, future research should employ Exploratory Factor Analysis (EFA) to further examine the reliability and validity of the instrument assessed in the current study. While this study has made valuable contributions, it is important to acknowledge its limitations. First, Principal's Distributive Leadership is dynamic and requires regular updates to research instruments. This study focused on only three dimensions of Principal's

Distributive Leadership: Support, Supervision, and Cohesive Leadership Team. Future studies may explore additional dimensions. Geographically, this study specifically involved experts from private universities in Henan Province, China, which limits its generalizability. Subsequent research could include participants from both public universities and colleges, extending the study across diverse regions. Additionally, the exclusive use of a self-administered online survey may have introduced certain biases. Future research could benefit from a hybrid approach, combining online and offline self-administered surveys for a more comprehensive understanding. Lastly, since this study involved only private university teachers in one country, further research could broaden the scope to include university teachers from different countries and take cultural variations into account.

#### **4. Conclusion**

This study has systematically addressed the critical need for validated instruments to accurately assess Principal's Distributive Leadership, specifically within the context of private universities in Henan, China. By employing the Content Validity Index (CVI) framework, we ensured a rigorous evaluation of the measurement tool, focusing on the core dimensions of Support, Supervision, and Cohesive Leadership Team. The involvement of a panel of five experts in educational management was integral to refining the questionnaire, as their expertise helped in aligning the instrument closely with the specific nuances and requirements of distributive leadership in educational settings. The study's approach, utilizing both the Scale-level Content Validity Index (S-CVI) and Item-level Content Validity Index (I-CVI), provided a comprehensive validation process. By setting stringent criteria—retaining only those items with an I-CVI of 1.00 or higher and an S-CVI of 0.9 or higher—we ensured that only the most relevant and accurate items were included for further use. The resulting strong content validity underscores the reliability and appropriateness of this instrument for further exploratory studies in the field. However, while the study lays a strong foundation for measuring distributive leadership among principals, it is critical to recognize that content validity is just one aspect of validating an instrument. For a more holistic and robust evaluation, future research should incorporate additional validation strategies, such as construct validity, to confirm the theoretical framework alignment, and reliability testing, to ensure consistency of the measurements over time and across various contexts. This study represents a valuable contribution to educational research methodology, offering a validated tool that can enhance the understanding and practice of distributive leadership in private university contexts. The implications of this research extend beyond academic settings, offering insights into how leadership measurement in educational management can be refined and standardized. As the landscape of educational leadership continues to evolve, the need for precise and validated measurement tools will remain a critical component in developing effective leadership strategies that can cater to diverse educational needs and challenges.

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### **Ethical Considerations**

This research was approved by the Research Ethics Committee of Universiti Kebangsaan Malaysia (Approval Ref: JEP-2024-1134).

### **Conflict of Interest**

The authors declare no conflicts of interest.

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