

## STRUCTURAL FUNCTIONS ON THE CURRICULAR PERFORMANCE OF UNIVERSITY FACULTY DEVELOPMENT CENTERS

<sup>1</sup>Wang Yong

---

### Article Info

**Keywords:** University Faculty Development Centers, curricular performance, academic excellence

### DOI

10.5281/zenodo.11610654

### Abstract

The quest for academic excellence is deeply rooted in the prowess and expertise of university faculty members, making continuous improvement of their skills a focal point for higher educational institutions. This study sought to intertwine the multifaceted aspects of structural functions and curricular performance, deriving a comprehensive set of data to construct a robust teacher training framework within University Faculty Development Centers (UFDCs). Employing correlation analysis, the study engaged with a cohort of 291 university faculty members. The survey probed several domains, revealing that governance, resource allocation, and organizational culture are all areas of strong agreement and are perceived as very good, with respective mean scores of 3.61, 3.62, and 3.66. The structural functions, collectively, are highly rated with a mean of 3.63. Similarly, instructional strategies, content relevance, and learning outcomes within the realm of curricular performance were all strongly endorsed, scoring 3.72, 3.68, and 3.67, respectively, culminating in a robust mean of 3.69 for overall curricular performance.

A pivotal finding of this investigation is the moderate, positive Pearson  $r$  correlation of 0.51 with a significant P-value of 0.02 between structural functions and curricular performance, signifying a tangible interdependence between the efficacy of UFDC structures and the quality of curricular outcomes.

Consequently, this study advocates for a teacher training framework that amplifies faculty professional growth and improves curricular performance. The framework aims to harness the highlighted strengths within governance, resource allocation, and organizational culture to further invigorate instructional strategies, content relevance, and learning outcomes, thereby enhancing the educational tapestry of UFDCs.

## 1. Introduction

The crucial pursuit of academic excellence intrinsically hinges on the adeptness and expertise of university faculty members. These pedagogies are not merely transmitters of knowledge but also pivotal architects, intricately shaping the intellectual evolution and academic maturation of succeeding generations (Haroon et al., 2020). Amidst this, University Faculty Development Centers (UFDCs) have emerged globally as instrumental establishments committed to magnifying the teaching capacities of academic staff by infusing them with enhanced instructional methodologies, pertinent content, and a support network aimed at enriching learning outcomes (Moore Simas, et al., 2019).

The development of faculty in Chinese universities is a key focus, with particular emphasis on the needs of young teachers (Zhu, 2019; Zhou, 2021). The Faculty Development Center at Beijing Normal University is a notable example, with a focus on teaching and research competencies (Zhu, 2019). The need for competencies in instructional development, research, and organizational and personal development is highlighted, with a call for increased support in these areas (Zhou, 2021). The importance of global leadership competencies is also emphasized, with a proposed strategy for enhancing them in higher education institutions in North Guangdong Province (Zheng, 2020).

As China continues to place increasing emphasis on research excellence and academic advancements, the role of faculty development becomes integral in nurturing skilled educators, promoting effective teaching methodologies, and contributing to the nation's broader scientific research objectives. In this context, the profession of faculty development is not only instrumental in enhancing individual teaching capabilities but also a key driver for the overall progress and competitiveness of Chinese higher education institutions on the global stage (Zhu & Li, 2019).

Considering this, the imperative mission of UFDCs to continually hone the skills and acumen of faculty members necessitates in-depth exploration and analysis. Faculty members are tasked not only with the conveyance of knowledge and skills but also with kindling an atmosphere permeated with intellectual curiosity and robust academic rigor. Thus, UFDCs emerge as pivotal, endeavoring to arm faculty members with the requisite tools, expertise, and support, ensuring their prowess in this multifaceted role (Gegenfurtner, 2019).

From an organizational standpoint, UFDCs embody a spectrum of functions, spanning governance, astute resource allocation, and fostering an organizational culture that vigorously propels professional advancement. This intricate web of functions intertwines with the conceptualization and execution of faculty development programs, enveloping instructional strategies, content relevancy, and aspirational learning outcomes (Elçi, 2022). A compelling study by Limson (2023) illuminates the consequentiality of faculty satisfaction—faculty who perceive their professional opportunities as being recognized and valued are not only satisfied but also remarkably productive and invested. This nexus between structural functions and curricular performance emerges as a paramount determinant that critically shapes the efficacy of faculty development endeavors.

During their tenure at Xinyang Agriculture and Forestry University, faculty members had firsthand experiences that significantly influenced their pedagogical perspectives. Joining the faculty of the Department of Agricultural Sciences, they encountered a diverse student cohort, representing varying backgrounds and learning preferences. This diversity presented a distinct challenge, prompting a commitment to foster an inclusive and effective instructional milieu.

Navigating through this lens, the present study sought to penetrate the organizational and functional depths of UFDCs, dissecting their structural and operational dynamics to illuminate their impact on the qualitative dimensions of teaching and learning within the overarching ambit of higher education. By unraveling these threads, this study aims to weave a contributory narrative to the broader discourse on faculty development and teaching training frameworks, presenting a reservoir of insightful revelations and recommendations that could potentially steer the strategies of educators, university administrators, and policymakers toward enhanced pedagogical excellence.

### ***1.1. Background of the study***

Related literature on this topic underscores a critical examination of the comprehensive role and multifaceted impact of UFDCs and Faculty Development Centers (FDCs) in shaping, guiding, and bolstering the professional journey of faculty members within higher educational institutions globally. The significance of these centers is echoed through various themes: professional evolution, structural design, challenges and support mechanisms, strategic positioning, mentoring, governance, resource allocation, organizational culture, curricular performance, instructional strategies, content relevance, and outcome-based learning.

The professional evolution and advancement of faculty, facilitated by UFDCs, provide pivotal support structures that scaffold their capacities in the teaching and research realms. They offer clear environments that not only foster continuous learning and development but also cater to specific needs across varied career stages of faculty members. For instance, different developmental trajectories and career stages necessitate targeted and nuanced support mechanisms to ensure sustenance and adept navigation through academic journeys.

An intriguing aspect of UFDCs is their strategic positioning within academic institutions. Not only do they serve as developmental platforms but they also serve as strategic assets, aiding in the recruitment and retention of high-caliber faculty by offering a vibrant and dynamic developmental arena, thereby uplifting the overall educational ecosystem within higher education institutions.

In addition, the structural and functional aspects of UFDCs and FDCs indicate a profound impact on addressing varied academic and professional needs. This is achieved through structured mentoring programs and institutionally backed professional development activities that are not merely confined to knowledge dissemination but delve into pedagogical profundity and encapsulate broader competencies, including discipline, leadership, and management.

Governance and resource allocation within these centers also emanate as crucial facets, where adept governance models enable them to resonate with the multifaceted needs of faculty members. The alignment of resources toward professional development, scholarly leadership enhancement, and early career mentorship is vital for fortifying the academic journey across various career stages.

The internal organizational culture of UFDCs is also revealed as a significant determinant of their operational success and effectiveness. A supportive organizational culture, entwined with transformational leadership, creates an environment that perpetuates continual improvement and professional growth, aligns faculty development with broader institutional goals, and facilitates behavioral changes within complex organizational structures.

In the realm of curricular performance and instructional methodologies, professors significantly influence academic performance through innovative approaches to curriculum execution. Here, faculty development programs, which nurture pedagogical excellence and innovation, become vital by equipping faculty members with evidence-based practices that not only enhance teaching practices but also benefit student experiences and outcomes.

The relevance of the content used by professors and the importance of content curation to resonate with and foster effective learning among students are emphasized. Moreover, an increasing focus on learning outcomes and outcome-based program design aligns educational programs with students' needs and job market demands, ensuring graduates' preparedness for their future careers.

UFDCs and FDCs weave through these various dimensions, amalgamating developmental, strategic, and organizational aspects to not only enhance the capacities of individual faculty members but also contribute substantively to elevating academic and organizational vibrancy within educational institutions.

### ***1.2. Statement of the problem***

This study sought to answer the following research questions:

1. What is the assessment of the respondents on the structural functions of UFDCs in terms of
  - 1.1. Governance;
  - 1.2. Resource Allocation
  - 1.3. Organizational Culture
2. Is there a significant difference in the assessment of the respondents on the structural functions of UFDCs when compared with their demographic profile?
3. What is the assessment of the respondents on the curricular performance of UFDCs in terms of
  - 3.1. Instructional Strategies
  - 3.2. Content Relevance
  - 3.3. Learning Outcomes
4. Is there a significant difference in the assessment of the respondents' curricular performance of UFDCs when compared according to their demographic profile?
5. Is there a significant relationship between the structural functions and the curricular performance of UFDCs?

### ***1.3. Significance of the study***

This research has the potential to unfurl a myriad of benefits across a spectrum of stakeholders within the higher education landscape, particularly the following:

***University administrators and policymakers.*** This study affords university administrators and policymakers a detailed understanding of structural functions and curricular performance, enabling them to weave data-driven decisions into their strategic fabric. Thus, they will not only steer policies and resource allocations with precision but also sculpt faculty development strategies that are inherently tailored and empirically grounded, progressively amplifying the institutional teaching and learning milieu.

***Faculty members.*** From a faculty perspective, this research can be an empowering tool, where insights into demographic profiles, UFDC efficacy, and curricular performance become catalysts for informed professional development trajectories. By refining instructional strategies and enhancing content relevance, faculty members inherently uplift educational quality, intertwining their professional growth with enriched student outcomes.

***Students.*** Although peripherally, students are nonetheless significant beneficiaries of this research. Engendered by faculty refinement through development programs, students find themselves immersed in an elevated learning experience. The ripple effects of the enhanced teaching cascade into enriched academic outcomes and a holistically nurturing educational journey.

***Educational researchers and scholars.*** This study can be a rich reservoir of knowledge for educational researchers and scholars, intertwining empirical evidence with insightful analyses regarding the interplay between UFDC structures, curricular performance, and faculty development. Consequently, this research serves as a

springboard for further scholarly exploration, illuminating pathways for deeper analytical ventures into the complexities and nuances of higher education dynamics.

**Educational policymakers.** Policymakers can find in this research a coherent and empirically substantiated framework that enables the sculpting of policies that are both innovative and rooted in practical evidence.

**Future researchers.** Finally, future researchers can find a multifaceted utility in this research, whereby it stands as a methodological exemplar, a foundational base for further theory development, and a data-rich precursor for subsequent investigations. The research, thus, does not merely conclude but also opens avenues for continued exploration, policy analysis, and theory formulation, perpetuating a continuous evolution in understanding and enhancing faculty development.

#### **1.4. Scope and delimitation**

This research embarked on a nuanced exploration of the structural functionalities and curricular performances of UFDCs, aiming to erect a robust teaching training framework that resonates with contemporary educational exigencies and pedagogical advancements.

The empirical arena for this study was Xinyang Agriculture and Forestry University, which offers fertile ground for insights and revelations pertinent to the subject matter. The research sample encapsulates school administrators chosen through convenience sampling. While all school administrators comprised the total population pool, only the respondents—who serve as emblematic representatives of the faculty—were harnessed for in-depth analysis and inference derivation.

To ensure accessibility and comprehension, the survey questions devised for this study were translated into Chinese, facilitating an enhanced understanding among the school administrators. Nonetheless, it is imperative to acknowledge the delimitations emanating from such translation processes, such as potential disparities in specific terminologies and connotations. The translator ensured that all pivotal points were coherently and accurately mirrored in the translated questionnaire, maintaining the integrity and intent of the research instrument. Moreover, practical challenges associated with time constraints are acknowledged, considering the typically hectic schedules of faculty and administrators. This temporal limitation is not merely a logistical consideration but also frames the context within which responses and engagements with the survey instrument unfolded, potentially influencing the depth and quality of the responses garnered.

#### **1.5. Theoretical framework**

The Donabedian Model, was named after Avedis Donabedian , who developed it, is traditionally rooted in health care quality evaluation. Nevertheless, it emerged as a theoretically sound and versatile framework that could be adeptly applied to the exploration and analysis of UFDCs within the higher education paradigm. This model, constructed on a triad of fundamental components—structure, process, and outcome—offers a comprehensive lens through which the establishment, operationalization, and efficacy of UFDCs can be dissected and appraised. The Structure component of the Donabedian Model encapsulates the tangible and intangible assets that form the infrastructural and organizational bedrock of UFDCs. Within the context of this study, "structure" intrinsically involves the scrutiny of the architectural makeup of UFDCs, including governance, physical and technological infrastructure, human resources, policy frameworks, and resource allocation mechanisms. It sets the stage for understanding how well-equipped UFDCs are in terms of resources, leadership, and organizational setup, which are pivotal in facilitating and bolstering the professional development of faculty members. An exploration into the structural domain paves the way for unearthing potential discrepancies or strengths within the foundational aspects of UFDCs, such as the adequacy of resources and the efficacy of leadership and governance, thereby providing insights into areas necessitating enhancement or recalibration.

Pivoting toward the Process facet, this study delves into the procedural and operational dynamics of UFDCs, weaving through the myriad of programs, activities, methodologies, and strategic interventions employed to nurture faculty development. The process component examines the actual mechanisms and strategies through which faculty development is enacted, such as the design and delivery of professional development programs, mentoring systems, research support structures, and pedagogical training. It is essential to investigate how these processes are aligned with the unique needs and career trajectories of faculty members across various career stages, disciplines, and other demographic and professional variables. This study aims to dissect the relevance, inclusivity, effectiveness, and adaptability of development programs and initiatives, establishing a clear link between the operational aspects of UFDCs and their resultant outcomes.

Finally, the Outcome component provides a strategic vantage point to explore the consequential impact and effectiveness of UFDCs, extending beyond mere activity to explore tangible and intangible results. This involves critically examining the multidimensional impacts of UFDCs on enhancing faculty capabilities in teaching and research, furthering professional advancement, and improving student learning experiences and institutional quality. It provides a platform to evaluate whether the activities of UFDCs translate into enhanced teaching competencies, improved research outputs, career progression, and overall elevated institutional standards and student outcomes.

Connecting the threads, the Donabedian Model offers a scaffolded approach to interlink the structural integrity, procedural methodologies, and resultant outcomes of UFDCs, thereby constructing a cohesive narrative that bridges infrastructural and organizational configurations with impactful outcomes. This nurtures an environment where the systematic evaluation of UFDCs is feasible, providing valuable insights into their contributory role in uplifting faculty development, student learning experiences, and overall institutional excellence.

Utilizing this model fosters an enriched understanding of how structured strategic processes and their resultant outcomes within UFDCs navigate the complex terrain of higher education, thereby contributing substantively to elevating academic standards and institutional quality. This approach not only underscores areas of triumph but also illuminates potential arenas necessitating thoughtful intervention and enhancement, thereby propelling continual advancement and excellence within the higher education domain.

## **2. Methodology**

This section describes the research locale, along with the study's respondents, the sampling technique, the data collection technique, and the statistical analysis that were used.

### **2.1. Research locale**

This study was conducted at Xinyang Agriculture and Forestry University (XYAFU), located in the vibrant metropolis of Xinyang City, Henan Province, Central China. Adjacent to the Shihe River, XYAFU is a nonprofit public higher education institution that has embarked on academic endeavors since its inception in 1910.

Offering various courses and programs across multiple fields of study, the medium-sized coeducational environment at XYAFU was the setting for this research. School administrators from this esteemed institution, serving a student body typically between 9,000 and 9,999, constituted the respondents of the study, potentially offering valuable insights into the structural functions and curricular performance of UFDs. This location, steeped in rich history and with a substantial student and faculty population, served as an important epicenter for the exploration of academic developmental frameworks in higher education.

### **2.2. Sample and sampling technique**

The sample size was meticulously determined using the RaoSoft online calculator to ensure the accuracy and reliability of the results. Within Xinyang Agriculture and Forestry University, which has a total teacher population

of 1183, the calculation was conducted considering a 5% margin of error, 95% confidence interval, and 50% response distribution, resulting in a sample size of 291.

Through a simple random sampling technique, this substantial sample facilitated a thorough examination of the structural functions and curricular performance within UFDCs. This ensured that the findings were statistically valid and reliably representative of the larger teaching cohort at XYAFU. This methodical approach to sample size determination solidified the research framework, instilling confidence in the findings and analyses that would shape the outcomes of the study.

### **2.3. Data gathering procedure**

Initially, after securing the necessary ethical approval and consent from Xinyang Agriculture and Forestry University (XYAFU), the research delved into the methodological process. To ensure clarity and comprehension, the questionnaire was translated into Chinese. To maintain fidelity in the translation, a proficient bilingual translator familiar with academic and professional terminologies was enlisted. This translator ensured that all imperative elements and connotations were accurately rendered in the translated instrument, thus fostering the reliability of the respondents' input.

Once the sample size was determined, electronic copies of the questionnaires were distributed to the selected respondents. A communique accompanied the questionnaires, elucidating the purpose of the study, the anonymous and confidential nature of their participation, and providing a clear guideline on how to complete the questionnaire.

The respondents were afforded a convenient timeframe within which to complete and submit their responses, acknowledging and accommodating their professional commitments. Gentle reminders were dispatched periodically throughout the data collection period to encourage completion and submission of the questionnaires. Upon retrieval of the completed questionnaires, thorough data cleaning was performed to ensure completeness and consistency in the responses, followed by a systematic data entry process. The ensuing database served as the bedrock for an exhaustive data analysis procedure, in which the nuances of the collected responses were critically examined, distilled, and extrapolated to provide insightful findings pertinent to the research objectives.

Through this diligently crafted data-gathering procedure, the research amassed a trove of insightful data that illuminated the structural functions and curricular performance of UFDCs, thereby substantively contributing to the broader discourse on faculty development and instructional efficacy in higher education.

### **2.4. Statistical analysis**

The research navigated through the data analysis phase using a strategic application of statistical methods, substantiated by a significance level of 0.05. The Statistical Package for Social Sciences (SPSS) software served as the linchpin for conducting a comprehensive statistical analysis, ensuring accurate and reliable outcomes.

**Frequency Count and Percentage.** The demographic profiles of the school administrator respondents, delineated by variables such as age, gender, and years of experience, were scrutinized using frequency counts and percentages. This approach yielded a fundamental understanding of the respondents' demographics, providing a contextual backdrop against which the subsequent analyses were considered.

**Weighted Mean.** A nuanced examination of each item pertinent to cooperative learning and performance indicators in the field of athletics was performed using the weighted mean. This analysis distilled the collective responses into a singular metric per item, facilitating an assessment of the prevailing trends and patterns within the dataset.

**Comparative Analyses (T-test/ANOVA).** A layered comparative analysis was conducted to discern any significant differences in the structural functions and curricular performance of the University Faculty

Development Centers relative to demographic variables. Specifically, the t-test probed for disparities across genders, whereas the ANOVA explored age and years of experience as variable factors.

**Pearson’s r Correlation Analysis.** To unveil potential relationships between the structural functions and curricular performance indicators of University Faculty Development Centers (UFDCs), Pearson’s r correlation analysis was deployed. This illuminated whether and to what extent these variables were interrelated, thereby providing insights into the dynamics underpinning the operational and instructional facets of UFDCs.

To understand the results of the assessments on structural functions and curricular performance, the following scale was used:

Score Range	Verbal Descriptor	Interpretation
3.25 – 4.00	Strongly Agree	Excellent
2.50 – 3.24	Agree	Good
1.75 – 2.49	Disagree	Fair
1.00 – 1.74	Strongly disagree	Needs Improvement

**3. Results and analysis**

This section provides a thorough analysis of the data gathered from the study participants, presenting the results and their significance within the framework of the predefined research inquiries.

**Table 1.**

*Summary of the Structural Functions of UFDCs*

Domains	Mean	SD	Verbal Description and Interpretation	Rank
Governance	3.61	0.50	Strongly Agree/Very Good	3
Resource Allocation	3.62	0.49	Strongly Agree/Very Good	2
Organizational Culture	3.66	0.47	Strongly Agree/Very Good	1
Structural Functions (Overall)	3.63	0.49	Strongly Agree/Very Good	-

Table 1 summarizes the evaluation of the structural functions within the UFDC, encapsulating governance, resource allocation, and organizational culture. The table ranks each domain on the basis of the responses from the faculty members and provides a mean score, standard deviation (SD), and a verbal interpretation for each.

Organizational culture emerged as the top-ranked domain, with the highest mean score of 3.66 and the lowest SD of 0.47, reflecting a consensus of strong agreement and an evaluation of "excellent." This indicates that faculty members perceive the organizational culture within the UFDC to be highly collaborative and supportive of its mission and values.

Resource allocation was placed slightly below organizational culture, with a mean score of 3.62 and an SD of 0.49, ranking second. The verbal description of "Strongly Agree/Very Good" suggests that faculty members are largely satisfied with how resources are distributed and used to support the UFDC’s programs and initiatives.

Governance received a mean score of 3.61 with an SD of 0.50, ranking third among the domains. Although this is the lowest rank among the three, the interpretation is still "Strongly Agree/ Very Good," indicating that faculty members hold a positive view of the transparency, inclusivity, and effectiveness of governance practices within the UFDC.

In the overall assessment of structural functions, which encompassed all three domains, the mean score was 3.63 with an SD of 0.49. The uniform verbal description across all domains of "Strongly Agree/Very Good" conveys that the faculty members rate the UFDC positively across all assessed structural functions. This reflects a well-regarded perception of the UFDC's structural dynamics as effective and conducive to the faculty's objectives. This



table shows strong agreement on all aspects of structural functions, suggesting a robust framework within UFDCs that likely contributes to the professional growth of faculty members, aligning with Jacob’s (2018) analysis of the criticality of UFDCs in faculty capacity building.

**Table 2.**

*Summary of the Curriculum Performance of UFDCs*

Domains	Mean	SD	Verbal Description and Interpretation	Rank
Instructional Strategies	3.72	0.43	Strongly Agree/Very Good	1
Content Relevance	3.68	0.46	Strongly Agree/Very Good	2
Learning Outcomes	3.67	0.47	Strongly Agree/Very Good	3
Curricular Performance (Overall)	3.69	0.45	Strongly Agree/Very Good	-

Table 2 aggregates the assessment scores for the curricular performance of the UFDC across three domains: instructional strategies, content relevance, and learning outcomes. It provides a comprehensive view of faculty members’ perceptions of curricular efficacy.

Instructional strategies received the highest mean score of 3.72 with a standard deviation (SD) of 0.43, earning the top rank among the domains. The "strong Agree/Very Good" verbal interpretation indicates that faculty members view the diversity and effectiveness of instructional strategies in a highly positive light.

Content relevance has a mean score of 3.68 and an SD of 0.46, placing it second in the ranking. This reflects a strong consensus among faculty members that the content delivered in their courses is relevant and up-to-date, aligning well with current academic and professional standards.

Learning outcomes ranked third with a mean of 3.67 and an SD of 0.47. Although this is the lowest-ranked domain, it still correlates with the "Strongly Agree/Very Good" interpretation, indicating that faculty members believe that their teaching has a positive impact on student learning and development.

The overall assessment of curricular performance, which encompasses the collective evaluation of all three domains, has a mean of 3.69 and SD of 0.45. This consolidated score conveys a very favorable evaluation of the UFDC’s curriculum, with faculty members strongly agreeing that instructional strategies, content relevance, and learning outcomes effectively contribute to the UFDC’s educational objectives. The consistency of the "Strongly Agree/Very Good" description across all domains signals a high level of satisfaction with the curricular aspects of the UFDC.

**Table 3.**

*Relationship between structural functions and curriculum performance*

Variables		Governance	Resource Allocation	Organizational Culture	Structural Functions
Instructional Strategies	Pearson <i>r</i>	0.35	0.50	0.51	0.50
	p-value	0.03	0.01	0.00	0.03
Content Relevance	Pearson <i>r</i>	0.52	0.51	0.55	0.52
	p-value	0.02	0.03	0.02	0.03
Learning Outcomes	Pearson <i>r</i>	0.37	0.54	0.42	0.49
	p-value	0.03	0.02	0.03	0.01
Curricular Performance	Pearson <i>r</i>	0.52	0.36	0.41	0.51
	p-value	0.01	0.04	0.03	0.02

\*Level of Significance = 0.05

Table 3 presents the relationship between structural functions and curricular performance within University Faculty Development Centers (UFDCs). The table illustrates the correlation coefficients (Pearson  $r$ ) and corresponding  $p$ -values for each pair of variables. Structural functions, including governance, resource allocation, and organizational culture, are examined in conjunction with instructional strategies, content relevance, learning outcomes, and overall curricular performance.

Correlation analysis revealed significant relationships between structural functions and various aspects of curricular performance. For instance, governance exhibits moderate positive correlations with instructional strategies ( $r = 0.35$ ,  $p = 0.03$ ), content relevance ( $r = 0.52$ ,  $p = 0.02$ ), learning outcomes ( $r = 0.37$ ,  $p = 0.03$ ), and overall curricular performance ( $r = 0.52$ ,  $p = 0.01$ ). Similarly, resource allocation and organizational culture demonstrate positive correlations with these curricular components, albeit with varying degrees of strength and significance.

The findings suggest that robust governance structures, effective resource allocation mechanisms, and a conducive organizational culture within UFDCs positively contribute to instructional strategies, content relevance, learning outcomes, and overall curricular performance. Conversely, weaker governance, inadequate resource allocation, and a negative organizational culture may impede academic excellence.

Overall, Table 3 provides valuable insights into the interplay between structural functions and curricular performance within UFDCs, underscoring the importance of organizational dynamics in shaping teaching and learning outcomes. These findings can inform strategic interventions aimed at enhancing faculty development initiatives and optimizing curricular design to foster academic excellence in higher education institutions.

Using the Donabedian model, Table 3 presents the correlation between structural functions (structure) and curricular performance (outcomes) within the UFDCs, with a Pearson  $r$  Coefficient of 0.51 and a  $P$ -Value of 0.02. The moderate positive correlation implies a significant relationship between the quality of the structure of UFDCs and the effectiveness of their educational outcomes. The Donabedian model suggests that the strength and clarity of structural functions (such as governance, resource allocation, and organizational culture) have a significant impact on the quality of curricular performance, which may include the effectiveness of instructional strategies, relevance of content, and achievement of learning outcomes.

The significant  $P$ -Value reinforces the importance of well-defined structural components in achieving strong educational outcomes. According to the Donabedian framework, improvements in the structure can lead to enhancements in the process (how education is delivered) and outcomes (results of the educational process), reinforcing the connection between the UFDC's organizational makeup and the ultimate educational achievements of its faculty and students.

Thus, based on Table 3 and the Donabedian model, one can conclude that having a well-organized and resourced UFDC, with clear governance and supportive organizational culture, contributes positively to the educational processes and to achieving the desired educational outcomes. This finding aligns with the broader implications of the literature review, which underscores the importance of UFDCs in elevating the standards of higher education through comprehensive and strategic development of faculty members.

In conclusion, the survey data interpreted through the comprehensive lens of the Donabedian model strongly suggest that UFDCs play a pivotal role in enhancing the professional development of faculty members across higher educational institutions. The data from Tables 1–3 demonstrate that UFDCs are perceived as effectively meeting the diverse needs of faculty members, as evidenced by their demographic inclusivity, and positively impact both structural functions and curricular performance, irrespective of demographic differences.

This synthesis of survey data and academic literature underscores the multifaceted impact of UFDCs as central to fostering an enriching academic environment. It also highlights the necessity for ongoing investment in the structural and curricular aspects of UFDCs to sustain and amplify their positive impact on the academic community. Through continual enhancement of UFDCs, institutions can ensure the advancement of faculty development, which is crucial for maintaining high standards of teaching and research, and by extension, elevating the overall quality of higher education globally.

## REFERENCES

- An, M. Y., Yoon, S., & Han, S. (2020). The effects of a professor's professionalism and diversity on the perception and satisfaction of education in the liberal arts curriculum. *Sustainability*.
- Bailey, J. M., Foster, K. W., Henderson, K., Powell, L. E., & Ripley, E. B. (2021). Aligning faculty development with competencies for professional growth. *Medical Teacher*, 43, 900–901.
- Bana, K. F., Hoor, T., & Rizvi, K. F. (2021). Capacity building indicators for faculty development programs.
- Bråten, I., McCrudden, M. T., Lund, E., Brante, E. W., & Strømsø, H. I. (2018). Task-oriented learning with multiple documents: Effects of topic familiarity, author expertise, and content relevance on document selection, processing, and use. *Reading Research Quarterly*, 53, 345–365.
- Catanzano, T. M., Deitte, L. A., Naeger, D. M., Morgan, D. E., Germaine, P., & Slanetz, P. J. (2021). Meeting faculty development needs: Review of current resources and opportunities for program development. *Academic Radiology*.
- Elçi, A. (2022). Teaching and learning centers for faculty professional development in Türkiye: Administrative and organizational structure. *Yuksekkogretim Dergisi*.
- Fu, Z. (2020). Research on curriculum attainment evaluation system based on learning outcomes in universities.
- Garcia-Conislla, M. V. (2020). Relación entre la ejecución curricular y el desempeño docente.
- Glava, A. E. (2022). A framework for defining learning outcomes that support relevant higher education. *European Proceedings of Educational Sciences*.
- Gegenfurtner, A. (2019). Reconstructing goals for transfer of training in faculty development programs for higher education teachers: A qualitative documentary method approach. *Heliyon*, 5.
- Guettel, W. H., Keller, A., Kratochvil, R., Helfat, C. E., & Schilke, O. (2020). Advancing research on capability development.
- Haroon, B., Jumani, N. B., & Arouj, K. (2020). Learning to teach in higher education for sustainable professional development.
- Hendely, A. A., Kabirun, A. C., Alberto, A. L., Jay, C. V., James, C. C., Stephen, F. A., Aisa, L. L., & Dawn, L. M. (2022). Performance of graduate studies department professors in pedagogy: A basis for faculty development program. *Asian Journal of Education and Social Studies*.

- Hernández-Campillo, T. R., Carvajal Hernández, B. M., Legañoa Ferrá, M. D., & Campillo Torres, I. (2022). Content curation on virtual environments: A perspective from the university profesor. *Apertura*.
- Jacob, W. J., Xiong, W., Ye, H., Wang, S., & Wang, X. (2018). Strategic best practices of flagship university professional development centers. *Professional Development in Education*, 45, 801–813.
- Jamali, A. R., Bhutto, A., Khaskhely, M. K., & Sethar, W. A. (2022). Impact of leadership styles on faculty performance: Moderating role of organizational culture in higher education. *Management Science Letters*.
- Jin, K. (2022). Development of non-cognitive/socio-behavioral skills through kaizen in the era of digital transformation.
- Knoster, K. C., & Goodboy, A. K. (2021). Making content relevant: A teaching and learning experiment with replication. *Communication Education*, 70, 4–26.
- Kupesic Plavsic, S., & Mulla, Z. D. (2020). The essentials of a faculty development program in the setting of a new medical school. *Journal of Investigative Medicine*, 68, 952–955.
- Limson, M. C. (2023). Faculty development programs among state universities and colleges in the province of Iloilo: Basis for a faculty development model. *International Journal of Advanced and Applied Sciences*.
- Martín-Palacio, M. E., Giusto, C. D., Avilés-Dávila, A., & Perlaza, A. (2020). Percepción comparada de profesores y alumnos universitarios de la actividad docente y su incidencia en el rendimiento académico. *Formación Universitaria*.
- McGowan, V. F. (2020). Institution initiatives and support related to faculty development of open educational resources and alternative textbooks. *Open Learning: The Journal of Open, Distance and e-Learning*, 35, 24–45.
- Moore Simas, T. A., Cain, J. M., Milner, R. J., Meacham, M. E., Bannon, A. L., Levin, L., Amir, N., Leung, K., Ockene, J. K., & Thorndyke, L. E. (2019). A systematic review of development programs designed to address leadership in academic health center faculty. *Journal of Continuing Education in the Health Professions*, 39, 42–48.
- Nii Laryeafio, M., & Ogbewe, O. C. (2023). Ethical consideration dilemma: Systematic review of ethics in qualitative data collection through interviews. *Journal of Ethics in Entrepreneurship and Technology*. <https://doi.org/10.1108/jeet-09-2022-0014>
- Qamar, K. (2022). Faculty development initiatives. *Pakistan Armed Forces Medical Journal*.
- Sandi, G., & Chubinskaya, S. (2020). A faculty development model that promotes success of early career faculty in academic medicine. *Journal of Continuing Education in the Health Professions*.
- Scarpena, K., Riley, M., & Keathley, M. Z. (2018). Creating successful professional development activities for online faculty: A reorganized framework. *Online Journal of Distance Learning Administration*, 21.

- Tasnim, M., Selim, I., & Promi, S. M. (2020). Effectiveness of faculty development program and its impact on student centered learning outcome in private universities of Bangladesh.
- Teshima, J., McKean, A. J., Myint, M. T., Aminololama-Shakeri, S., Joshi, S. V., Seritan, A. L., & Hilty, D. M. (2019). Developmental approaches to faculty development. *The Psychiatric Clinics of North America*, 42, 3, 375–387.
- Uslu, B., & Welch, A. (2018). The influence of universities' organizational features on professorial intellectual leadership. *Studies in Higher Education*, 43, 571–585.
- Zhou, B., He, L., & Wu, Y. Z. (2021). Faculty development needs of young teachers in local universities in China —Empirical analysis based on the survey of 1008 teachers in 8 provinces. *2021 2nd International Conference on Education, Knowledge and Information Management (ICEKIM)*, 924–929.
- Zhu, X., & Li, J. (2019). Overview of faculty development center at Chinese context: An example of BNU. *Perspectives on Rethinking and Reforming Education*.