

The influence of exploitative management style on student learning outcomes in public higher education institutions of Cambodia: Faculty development initiatives as a mediator

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Abstract: This study examines the influence of exploitative management style (EMS) on student learning outcomes (SLOs) in Cambodian public higher education institutions, with faculty development initiatives (FDIs) analyzed as a mediating factor. A quantitative approach was employed, using Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze responses from 305 lecturers across selected public universities. Validated constructs were applied to measure EMS, FDIs, and SLOs, ensuring reliability and validity. The structural model reveals that EMS significantly influences both SLOs ($\beta = 0.220$, $t = 4.108$, $p = 0.000$) and FDIs ($\beta = 0.426$, $t = 9.945$, $p = 0.000$). FDIs, in turn, significantly enhance SLOs ($\beta = 0.382$, $t = 6.539$, $p = 0.000$) and partially mediate the relationship between EMS and SLOs ($\beta = 0.163$, $t = 5.506$, $p = 0.000$). The model explains 18.0% of the variance in FDIs and 26.4% in SLOs, with acceptable predictive relevance and fit. EMS positively affects SLOs both directly and indirectly through FDIs, indicating that, within structured academic environments, EMS contributes positively by fostering clarity, discipline, and targeted faculty development. The study highlights the importance of strategically aligning management practices with faculty development programs to strengthen student learning outcomes in resource-constrained higher education contexts.

Keywords: *Exploitative management style, Faculty development initiatives, Mediation analysis, Public higher education in Cambodia, Student learning outcomes.*

1. Introduction

Public higher education institutions in Cambodia play a crucial role in developing the nation's future workforce and leaders. Among the many factors influencing educational quality, the management style of institutional leaders is a key element that shapes the learning environment and student outcomes [1]. One management approach that warrants close examination is the exploitative management style, characterized by authoritative control, limited participation, and a top-down decision-making process. This style often emphasizes strict supervision and compliance over collaboration, which may affect both faculty motivation and student engagement in complex ways. In Cambodian public higher education, the exploitative management style can impact student learning outcomes by creating a highly structured but potentially rigid academic atmosphere. While such an approach may enforce discipline and clarity in expectations, it may also suppress creativity, reduce faculty autonomy, and limit opportunities for innovative teaching practices. These constraints can negatively influence students' critical thinking and overall academic development [2]. Moreover, exploitative management may hinder faculty development initiatives, as it often discourages open communication and professional growth, which are vital for improving instructional quality and adapting to evolving educational needs [3]. Faculty development initiatives, including training and skill enhancement programs, play a critical role in mediating the relationship between management style and student outcomes. When faculty

members receive adequate support and opportunities for professional growth, they are better equipped to engage students effectively and improve learning experiences. However, under an exploitative management style, these initiatives may be underprioritized or poorly implemented, weakening their potential benefits [4].

The exploitative management style is characterized by a top-down, authoritarian approach where decision-making is centralized, and communication flows primarily from leaders to subordinates with little to no input or feedback from lower levels. In the context of public higher education institutions, such a management style can severely limit the effectiveness of academic and administrative functions. This approach often results in a climate of mistrust and low morale among faculty and staff, which ultimately impacts the quality of education and the achievement of student learning outcomes [5]. Exploitative management tends to disregard the professional expertise and autonomy of academic staff, leading to minimal collaboration in curriculum development, teaching innovations, or research initiatives. Faculty members under this style may feel undervalued and demotivated, reducing their engagement and willingness to participate in institutional improvement efforts. In higher education, where intellectual freedom and shared governance are essential for fostering innovation and academic excellence, exploitative management can stifle creativity and limit responsiveness to changing educational demands [2]. Furthermore, the negative effects of exploitative management extend to student learning outcomes (SLOs). When faculty and administrative staff operate under pressure and restricted communication, the design, implementation, and assessment of SLOs may lack the necessary rigor and relevance. This misalignment can hinder students' acquisition of critical skills, knowledge, and competencies that higher education aims to develop [6]. For instance, if faculty are not involved in setting or revising learning objectives, or if feedback mechanisms are weak, programs may fail to adapt to industry needs or accreditation requirements, undermining the institution's mission and students' future employability. In Cambodia's public higher education sector, exploitative management poses particular challenges given the ongoing reforms and efforts to improve education quality [7]. Institutions face pressures to meet accreditation standards, expand access, and align curricula with socio-economic development goals. However, when management remains rigid and top-heavy, faculty development initiatives and collaborative governance are often sidelined. This can slow progress in updating curricula, integrating student-centered teaching methods, or improving assessment practices critical for enhancing SLOs [8]. The persistence of exploitative management in some public universities may be linked to historical governance traditions and resource constraints. With limited funding and infrastructure challenges, administrative leaders might prioritize control and compliance over empowerment and innovation. While such an approach may appear to streamline decision-making, it risks alienating key stakeholders and diminishing the institution's adaptability in a rapidly changing higher education environment [2]. Tackling exploitative management calls for a conscious move toward leadership approaches that emphasize participation and inclusivity. Encouraging faculty involvement in decision-making, fostering open communication, and investing in faculty development initiatives can create a more supportive institutional culture. This, in turn, promotes ownership of educational goals, improves the quality of student learning outcomes, and enhances institutional reputation and societal impact [6].

In the context of public higher education institutions (HEIs) in Cambodia, understanding the impact of management styles on educational outcomes is essential for institutional improvement and policy development. Among various leadership approaches, the exploitative management style—often characterized by top-down control and limited participatory decision-making—remains prevalent in many public institutions. This study seeks to investigate how such a management style influences key academic factors, particularly student learning outcomes and faculty development initiatives. Based on these aims, the study is guided by the following research questions.

RQ1: Does the exploitative management style positively influence student learning outcomes in public higher education institutions (HEIs) in Cambodia?

RQ2: Does the exploitative management style positively influence faculty development initiatives in public HEIs in Cambodia?

RQ3: Do faculty development initiatives positively influence student learning outcomes in public HEIs in Cambodia?

RQ4: Do faculty development initiatives significantly mediate the relationship between exploitative management style and student learning outcomes in public HEIs in Cambodia?

The primary objective of this research is to examine the impact of exploitative management style on student learning outcomes within public higher education institutions (HEIs) in Cambodia. Specifically, the study aims to investigate whether such an exploitative management style positively influences not only student learning outcomes but also the implementation and effectiveness of faculty development initiatives. Furthermore, the study examines the role of faculty development in enhancing student learning outcomes. By addressing these objectives, the research seeks to provide deeper insights into how exploitative management style practices and faculty development initiatives interact as support mechanisms to shape educational outcomes in the context of Cambodian public higher education institutions (HEIs).

2. Literature Review

An exploitative management style refers to a leadership approach where employees are treated unfairly or unethically, often to serve the interests of management at the expense of staff well-being. In educational settings, this style can significantly undermine both faculty performance and student learning outcomes. When teachers and academic staff are overburdened, underappreciated, or excluded from decision-making processes, their motivation and morale tend to decline. This diminished enthusiasm affects their ability to deliver high-quality instruction and student support, ultimately reducing the effectiveness of the educational experience [9]. Exploitative leadership often fosters a toxic organizational culture marked by stress, dissatisfaction, and high turnover rates. Frequent staff departures can disrupt course continuity and reduce the institutional capacity to maintain consistent academic standards. Moreover, exploitative practices may lead to poor allocation of resources, such as inadequate teaching materials or outdated technology, which directly affects the quality of student learning environments [10]. Faculty who are constantly managing excessive workloads or administrative pressures may find it challenging to prioritize student-centered teaching or stay engaged in professional development initiatives that could benefit their students [11]. The cumulative impact of such a management style not only lowers the quality of instruction but also weakens institutional commitment to long-term improvement and innovation. To counter these negative effects, educational institutions must embrace more ethical and supportive leadership models that prioritize respect, fairness, and staff empowerment. Implementing transparent policies, encouraging staff participation in governance, and fostering a culture of continuous improvement are vital steps toward restoring trust and promoting better learning outcomes.

Student learning outcomes (SLOs) refer to clear and specific descriptions of the key knowledge, abilities, and competencies that learners are expected to develop upon completing a course or academic program. These outcomes are designed to be clear, observable, and measurable, aligning with the intended objectives of the curriculum [12]. With increasing emphasis on accountability in higher education, assessing these outcomes has become a key strategy for evaluating student progress, guiding instructional decisions, and shaping institutional policies. Assessments of learning outcomes play a crucial role in identifying the strengths and weaknesses in student performance. They provide instructors and institutions with valuable data that can be used diagnostically to refine teaching practices and improve educational programs. For instance, when students perform below expected standards, assessment results can help pinpoint areas that require targeted intervention. Conversely, strong performance highlights effective instructional approaches worth reinforcing. These indicators serve not only as evaluative tools but also as benchmarks for continuous improvement in educational quality [13]. SLOs also serve to reflect students' terminal behavior or final performance after being

exposed to specific learning experiences. Achievement in this context is typically measured through assessments such as exams, projects, or practical tasks, which reveal a student's level of mastery. Furthermore, achievement tests offer comparative insights, allowing educators to analyze individual student outcomes against peers or established standards [12]. The relevance of SLOs extends beyond academic performance to broader educational goals, as various stakeholders—including educators, institutions, and families—rely on outcome data to understand the effectiveness of learning experiences. Shafait, et al. [13] emphasized that factors like cognitive ability, interest, and skill retention significantly affect student learning outcomes, particularly in technical or content-heavy subjects. Overall, systematic assessment and interpretation of learning outcomes are vital for promoting student success and guiding meaningful improvements in higher education.

Faculty development initiatives aim to enhance teaching effectiveness and support academic staff in developing their roles as educators, researchers, and leaders. These initiatives encompass a wide range of activities, including workshops, peer coaching, mentorship, online learning, and workplace-based experiences. While traditionally delivered through formal programs in higher education institutions, there is growing recognition of the value of informal, experiential learning in real-world teaching environments [14]. In Cambodia, faculty development has expanded notably in recent years in response to evolving educational practices and assessment standards, with many institutions offering various programs to strengthen teaching competencies [15]. Effective faculty development incorporates a combination of strategies tailored to individual and group settings and spans different domains, such as teaching, leadership, and scholarship. According to Steinert, et al. [14] and Zhen and Ali [16] successful programs often involve experiential learning, structured feedback, collaborative networks, and a diverse mix of educational methods. These approaches foster deeper learning and promote changes in teaching attitudes, knowledge, and practices. However, while improvements in teaching behavior are commonly reported, changes at the organizational level or in student learning outcomes are less frequently observed. Recent studies have emphasized the importance of sustained, longitudinal programs over one-time workshops. They also advocate for a shift toward understanding how workplace environments influence teaching practices and how communities of practice support faculty learning. Continuous collaboration with peers, guidance from mentors, and engagement in reflective practices are vital for sustained professional growth. Research by Rahman [15] also highlights the need for future faculty development efforts to align with real teaching contexts, encouraging integration between structured programs and the everyday work environment.

2.1. Exploitative Management Style and Student Learning Outcomes

An exploitative management style, which emphasizes rigid control and authority often at the expense of ethical standards and stakeholder well-being, can have a detrimental effect on students' learning outcomes in higher education. When institutions adopt such a management approach, the focus tends to shift away from collaborative and student-centered practices toward rigid hierarchies and power consolidation. This environment may inhibit academic engagement, lower motivation, and hinder intellectual development among students. According to Kappo-Abidemi and Ogujiuba [17] such managerial approaches can erode trust and suppress innovation, creating a negative climate that directly impacts student performance. Furthermore, Wang, et al. [18] argue that exploitative leadership models compromise not only the morale of academic staff but also the academic experience of students, as decision-making often excludes those affected most. These environments often lack transparency, inclusivity, and effective communication, all of which are key to fostering a positive educational setting. Li [19] emphasizes that institutions characterized by ethical and participative leadership tend to promote more favorable learning outcomes. In contrast, exploitative systems discourage open dialogue and fail to prioritize student development. When leadership becomes disconnected from the needs and voices of students, the potential for holistic academic success diminishes significantly. Particularly in emerging education systems such as Cambodia's, where there are limited, empirical studies exploring the effects of leadership style on educational quality, it is essential to examine these dynamics closely.

Understanding how exploitative management influences student outcomes can provide vital insights for policy reform and institutional improvement. Given the above rationale and the gaps in current research, particularly in the Cambodian context, this study aims to test the following hypothesis:

H₁: Exploitative management style has positive influence on student learning outcomes in public HEIs of Cambodia.

2.2. Exploitative Management Style and Faculty Development Initiatives

Exploitative management styles in higher education faculty development initiatives, characterized by emphasizing control and authority over ethical practices and the well-being of stakeholders, can produce detrimental effects [20]. Research highlights that effective faculty development programs tend to emerge from collaborative processes that address the specific needs of educators while fostering a supportive and constructive institutional environment [21, 22]. Institutions that emphasize ethical leadership, fair distribution of resources, and authentic commitment to faculty growth are generally more successful in improving educational quality and enhancing student learning outcomes [23]. Despite the growing body of literature in developed nations, there remains a scarcity of research focused on management styles and faculty development initiatives within developing countries such as Cambodia. This gap underscores the importance of investigating how exploitative management practices influence faculty development in these contexts. Drawing from these insights, the study proposes the following hypothesis:

H₂: Exploitative management style has positive influence on faculty development initiatives in public HEIs of Cambodia.

2.3. Faculty Development Initiatives and Student Learning Outcomes

Faculty development initiatives and strong leadership practices are essential for improving the quality of teaching and learning in higher education. The growing dependence on online adjunct faculty, especially during the COVID-19 pandemic, has changed how academic leaders manage and support remote instructors. As noted by Matos and Kasztelnik [24] the expansion of online programs has led institutions to recruit part-time professors to meet teaching needs. Yet, there remains a significant gap in research on targeted leadership approaches to effectively engage and support these adjunct instructors. Without such approaches, teaching quality and faculty morale may suffer. Likewise, faculty development programmes (FDPs) are critical for preparing educators to handle multiple academic responsibilities. Rahman [15] observed that young faculty who engaged in FDPs showed enhanced skills in curriculum planning, teaching methods, assessment, and integrating technology. These programmes not only strengthen individual teaching capacity but also promote institutional development and innovation. The research underscores the value of sustained investment in training programs to boost instructional effectiveness and guide educational policy reforms. Furthermore, Steinert, et al. [14] stress the significance of faculty development in health education, where teachers often instruct beyond their clinical disciplines. Their comprehensive review indicates that initiatives like mentoring, peer coaching, and professional workshops significantly enhance teaching practices and career growth. The study highlights the need to integrate faculty development within a broader institutional framework that fosters continuous improvement and collaboration. In conclusion, aligning effective leadership with comprehensive development programmes creates a more motivated, skilled, and forward-thinking academic community—leading to stronger teaching practices and better learning outcomes for students.

H₃: Faculty development initiatives have positive influence on student learning outcomes in public HEIs of Cambodia.

2.4. Faculty Development Initiatives, Exploitative Management Style, and Student Learning Outcomes

This study explores the mediating role of faculty development initiatives in the relationship between exploitative management styles and student learning outcomes in higher education institutions

in Cambodia. Globally, research has identified that management styles significantly influence student academic performance, with exploitative management, characterized by authoritarian control and disregard for ethical practices often leading to adverse effects on the educational environment. Such management approaches tend to undermine faculty motivation and engagement, which can negatively impact teaching quality and, subsequently, student learning outcomes [20]. Faculty development initiatives, which aim to improve educators' skills and professional growth, have been shown to mitigate some of these negative effects by fostering a more supportive and collaborative atmosphere despite a challenging management climate. These initiatives provide faculty members with resources and training that can empower them to navigate and adapt to less favorable management conditions, thus potentially improving their teaching effectiveness [21]. Empirical studies have demonstrated that faculty development can serve as a mediating factor, buffering the detrimental impact exploitative leadership styles may have on student achievement [23]. In the context of Cambodia's public higher education institutions, where research on exploitative management is scarce, understanding this mediating effect is critical for developing policies that enhance educational quality. Consequently, drawing from the current literature and the critical role of faculty support mechanisms, this study proposes the following hypothesis:

H_4 : Faculty development initiatives significantly influence the relationship between exploitative management style and student learning outcomes in public HEIs of Cambodia.

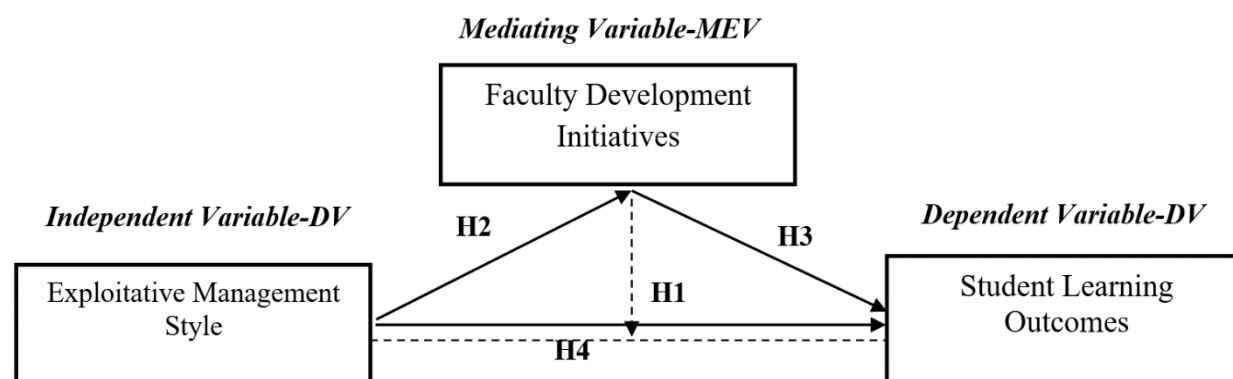


Figure 1.
Theoretical Framework.

3. Research Methodology

3.1. Sampling and Data Collection

Research design is the conceptual blueprint within which research is conducted [25] it is recommended to employ quantitative research methods instead of the formerly prevalent qualitative approaches. Moreover, Creswell and Guetterman [26] described the population as a group of individuals who share the same characteristics and other common features that the researcher can identify and study. Consequently, the present research focuses on lecturers from selected public universities in Cambodia. These public universities were chosen for this study for several key reasons. Furthermore, Krejcie and Morgan [27] sample size determination criteria were used to calculate the representative sample size for this study.

Meanwhile, the questionnaire was meticulously developed using validated items corresponding to the study's key constructs. A pilot study was carried out to evaluate the instrument's internal consistency and reliability. The results revealed that Cronbach's alpha coefficients for the majority of the constructs ranged from 0.730 to 0.908, thereby exceeding the commonly accepted threshold of 0.70 [28]. Following the pilot validation, hard copies of the finalized questionnaires were distributed to all academic staff at selected public universities in Cambodia to ensure efficient and effective data collection.

In total, 460 hard-copy questionnaires were distributed to academic staff across selected public higher education institutions in Cambodia. This effort yielded 326 returned surveys, representing a response rate of approximately 70.9%. Upon screening the responses, 21 questionnaires were excluded due to substantial incomplete data. Consequently, 305 fully completed and valid questionnaires were retained for subsequent analysis. Thus, the overall response rate was 66.3%, which is considered acceptable for quantitative analysis in Table 1.

Table 1.

The demographic characteristics of the respondents.

| Factors | Classification | Repetition | Proportion |
|------------------------|----------------|------------|------------|
| Gender | Female | 28 | 9.2 |
| | Male | 277 | 90.8 |
| Marital Status | Single | 36 | 11.8 |
| | Married | 258 | 84.6 |
| | Other | 11 | 3.6 |
| Age | >30yrs | 33 | 10.8 |
| | 31-40yrs | 55 | 18.0 |
| | 41-50yrs | 110 | 36.1 |
| | 51-60yrs | 82 | 26.9 |
| | > 61yrs | 25 | 8.2 |
| Academic Qualification | MSc. | 274 | 89.8 |
| | PhD | 31 | 10.2 |
| Working Experience | >5yrs | 48 | 15.7 |
| | 6 – 10yrs | 55 | 18.0 |
| | 11 – 15yrs | 71 | 23.3 |
| | 16 – 20yrs | 89 | 29.2 |
| | > 20yrs | 42 | 13.8 |
| N | | 305 | |

3.2. Measurement

A structured survey instrument comprising four sections was developed to measure the core constructs of the study and Items addressing exploitative management style were designed to reflect the technological context, drawing on established frameworks. Faculty development initiatives measures were adapted from previously validated scales, while student learning outcomes was assessed using multiple dimensions based on prior educational research. A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was utilized to capture respondents' perceptions.

3.3. Data Analysis

SmartPLS software was utilized in the present study to evaluate the proposed research framework, as it is a widely adopted tool for quantitative data analysis. Specifically, SmartPLS facilitated the assessment of the structural model, enabling the examination of the model's predictive capacity and the relationships among the constructs [29]. In this study, SmartPLS 3.0 was employed to estimate both the measurement model (external model), which involved evaluating constructs' consistency and strength, and the structural model (internal model), which assessed the hypothesized relationships between latent variables.

4. Research Result

4.1. Measurement Model Evaluation

Table 2, the reliability and validity of the constructs were confirmed using Cronbach's alpha, composite reliability (CR), AVE, and discriminant validity, following [29]. All constructs demonstrated strong internal consistency (α and CR > 0.90) and convergent validity (AVE > 0.60). Items with factor loadings ranging from 0.70 to 0.90 were retained in the model.

Table 2.
Construct Reliability and Validity.

| Construct | Items | Loadings | Cronbach Alpha | Composite Reliability | Average Variance Extracted |
|---------------------------------|-------|----------|----------------|-----------------------|----------------------------|
| Exploitative Management Style | EMS1 | 0.774 | 0.910 | 0.931 | 0.692 |
| | EMS3 | 0.809 | | | |
| | EMS4 | 0.832 | | | |
| | EMS5 | 0.795 | | | |
| | EMS6 | 0.880 | | | |
| Faculty Development Initiatives | EMS7 | 0.894 | 0.935 | 0.948 | 0.754 |
| | FDI1 | 0.828 | | | |
| | FDI2 | 0.829 | | | |
| | FDI3 | 0.915 | | | |
| | FDI4 | 0.861 | | | |
| | FDI5 | 0.915 | | | |
| Student Learning Outcomes | FDI6 | 0.856 | 0.984 | 0.986 | 0.843 |
| | SLO10 | 0.831 | | | |
| | SLO11 | 0.913 | | | |
| | SLO12 | 0.930 | | | |
| | SLO14 | 0.916 | | | |
| | SLO15 | 0.929 | | | |
| | SLO16 | 0.916 | | | |
| | SLO17 | 0.932 | | | |
| | SLO2 | 0.912 | | | |
| | SLO3 | 0.921 | | | |
| | SLO4 | 0.938 | | | |
| | SLO5 | 0.938 | | | |
| | SLO6 | 0.935 | | | |
| | SLO7 | 0.921 | | | |

Table 3 demonstrates that discriminant validity was established through the Fornell–Larcker criterion, confirming that each construct is empirically unique. The square root of the AVE for each construct, Exploitative Management Style (0.832), Faculty Development Initiatives (0.868), and Student Learning Outcomes (0.918) was greater than its correlations with any other construct, thus satisfying the standard set by Fornell and Larcker [30]. These findings confirm the discriminant validity and overall robustness of the measurement model [29].

Table 3.
Latent Variable Correlations (Fornel-Larcker Criterion).

| Constructs | EMS | FDI | SLO |
|---------------------------------------|--------------|--------------|--------------|
| Exploitative Management Style (EMS) | 0.832 | | |
| Faculty Development Initiatives (FDI) | 0.425 | 0.868 | |
| Student Learning Outcomes (SLO) | 0.379 | 0.475 | 0.918 |

Table 4, discriminant validity was further supported using the Heterotrait-Monotrait Ratio (HTMT), with all values below the 0.90 threshold [31]. Specifically, EMS–FDI (0.457), EMS–SLO (0.400), and FDI–SLO (0.487) indicate clear distinction among constructs, confirming strong discriminant validity in the measurement model.

Table 4.
Discriminant Validity (Heterotrait-Monotrait Ratio - HTMT).

| Constructs | EMS | FDI | SLO |
|---------------------------------------|-------|-------|-----|
| Exploitative Management Style (EMS) | | | |
| Faculty Development Initiatives (FDI) | 0.457 | | |
| Student Learning Outcomes (SLO) | 0.400 | 0.487 | |

4.2. Structural Model Evaluation

After validating the measurement model, the R^2 values show how much the endogenous constructs are explained by the exogenous variables. Higher R^2 values indicate greater explanatory power. According to Chin [32] R^2 values above 0.67 are regarded as high, values between 0.33 and 0.67 are moderate, and those between 0.19 and 0.33 are considered small and R^2 values below 0.19 are undesirable. Table 5 shows that the model explains $R^2 = 18.0\%$ of the variance in Faculty Development Initiatives and $R^2 = 26.4\%$ in Student Learning Outcomes, indicating weak and moderate explanatory power, respectively. The adjusted R^2 values (0.178 and 0.259) are slightly lower, confirming the model's stability and minimal overfitting, and suggesting that the predictors meaningfully contribute to the explained variance.

Table 5.

Coefficient of Determination (R Square).

| Constructs | R-square | R-square adjusted |
|---------------------------------|----------|-------------------|
| Faculty Development Initiatives | 0.180 | 0.178 |
| Student Learning Outcomes | 0.264 | 0.259 |

Furthermore, the f^2 effect sizes were computed to assess the impact of each exogenous variable on the R^2 value of the endogenous constructs, using [33] guidelines, where values of 0.02, 0.15, and 0.35 represent small, medium, and large effects, respectively. Table 6 presents the effect size (f^2) values that assess the contribution of each exogenous construct to its respective endogenous construct within the model. The analysis shows that Exploitative Management Style has a weak direct effect ($f^2 = 0.052$) on Student Learning Outcomes, indicating a limited standalone influence. In contrast, Faculty Development Initiatives exhibit a moderate effect ($f^2 = 0.164$) on Student Learning Outcomes, underscoring their importance in enhancing educational quality. Furthermore, Exploitative Management Style has a moderate effect ($f^2 = 0.220$) on Faculty Development Initiatives, suggesting that managerial practices significantly shape the design and implementation of faculty development initiatives. These findings support the hypothesized mediating role of faculty development initiative in the relationship between exploitative management and student learning, pointing toward a partial mediation effect.

Table 6.

Effect Sizes (f^2) Analysis.

| Student Learning Outcomes | Effect Size | Decisions |
|---------------------------------|-------------|-----------|
| Exploitative Management Style | 0.052 | Weak |
| Faculty Development Initiatives | 0.164 | Moderate |
| Faculty Development Initiatives | Effect Size | Decisions |
| Exploitative Management Style | 0.220 | Moderate |

Furthermore, Q^2 values were derived using the blindfolding procedure to evaluate the model's predictive relevance; values greater than zero suggest that the model has sufficient predictive accuracy [34]. The Q^2 values obtained for the endogenous constructs demonstrate that the model possesses predictive relevance. Specifically, the Q^2 for Student Learning Outcomes is 0.218, reflecting a medium level of predictive relevance. The Q^2 for Faculty Development Initiatives is 0.133, suggesting a moderate to strong predictive power. Since both values exceed the threshold of Zero, it can be concluded that the model exhibits acceptable predictive relevance for these constructs in Table 7.

Table 7.
Construct Cross Validated Redundancy (Q²).

| Constructs | SSE | SSO | 1-SSE/SSO |
|---------------------------------|-----------|-----------|-----------|
| Faculty Development Initiatives | 1,830.000 | 1,586.198 | 0.133 |
| Student Learning Outcomes | 3,965.000 | 3,101.287 | 0.218 |

Note: SSO - Systematic Sources of Output; SSE - Systematic Sources of Error.

Hence, with SRMR values of 0.062 for both the saturated and estimated models—falling below the suggested threshold of 0.10—it can be concluded that the model employed in this study exhibits a good fit [35, 36]. Table 8 provides a summary of the structural model indicators.

Table 8.
Goodness of Fit of The Model.

| Item | Saturated Model | Estimated Model |
|------------|-----------------|-----------------|
| SRMR | 0.062 | 0.062 |
| d_ULS | 1.254 | 1.254 |
| d_G | 11.833 | 11.833 |
| Chi-Square | 8,870.413 | 8,870.413 |
| NFI | 0.493 | 0.493 |

4.3. Hypothesis Testing

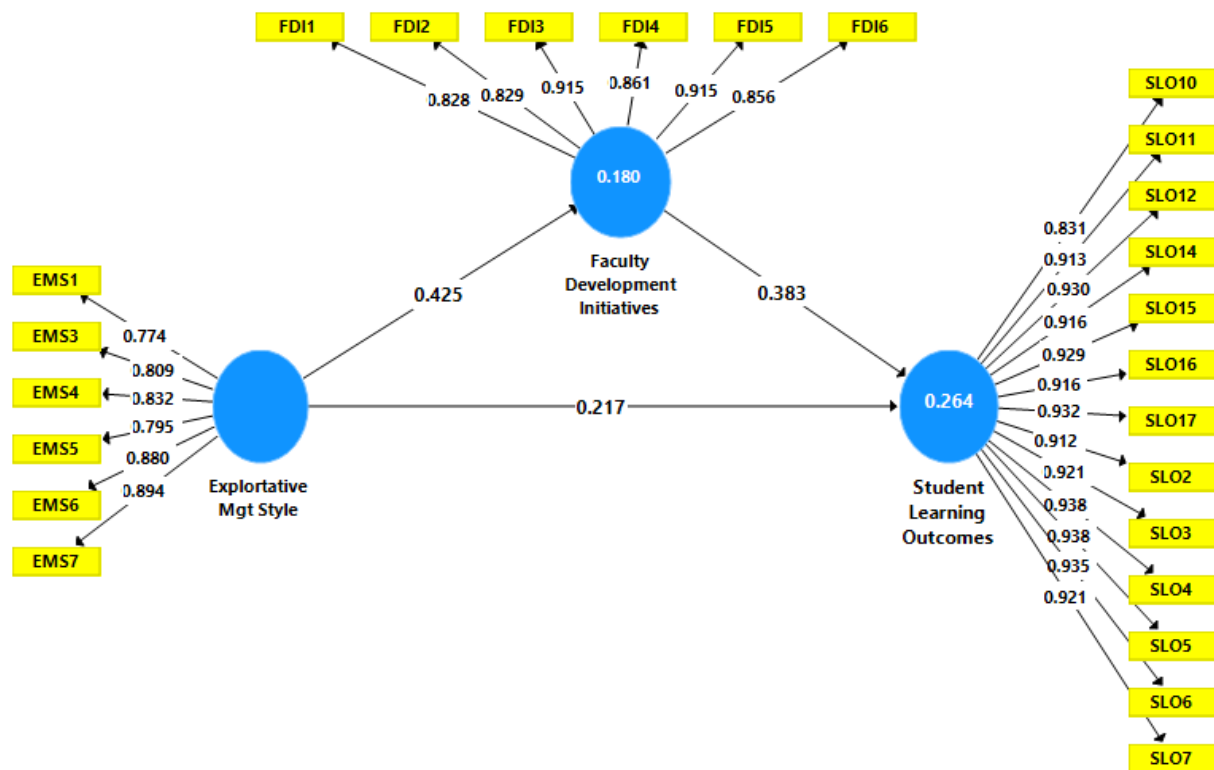


Figure 2.
Path Model Significant.

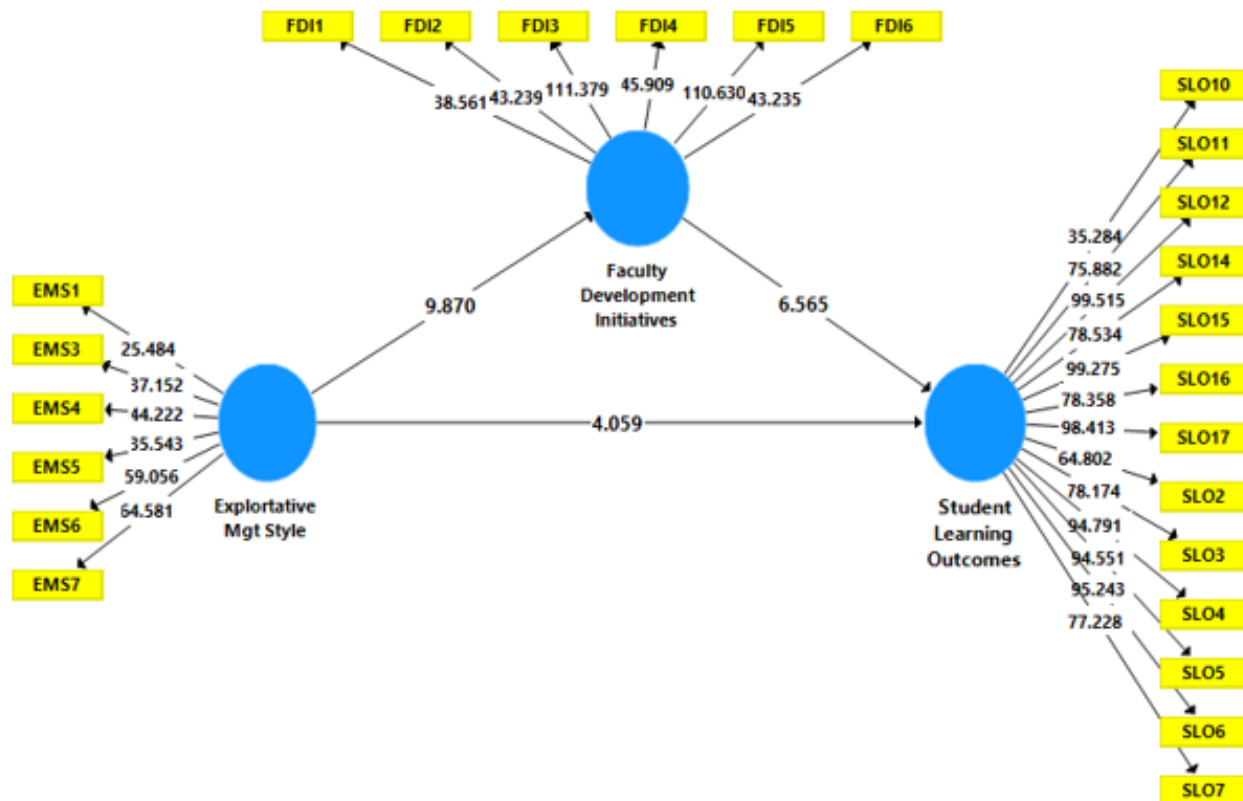


Figure 3.
Path Model Results of Mediation.

The structural model results provide empirical support for all four hypothesized relationships in Table 9. *H1* is supported, indicating that exploitative management style (EMS) has a significant positive effect on student learning outcomes (SLOs) ($\beta = 0.220$, $t = 4.108$, $p = 0.000$). *H2* is also supported, with EMS showing a strong positive influence on faculty development initiatives (FDI) ($\beta = 0.426$, $t = 9.945$, $p = 0.00$). Support for *H3* confirms that FDIs positively affects SLOs ($\beta = 0.382$, $t = 6.539$, $p = 0.000$). Finally, *H4* is supported through a significant indirect effect of EMS on SLOs via FDIs ($\beta = 0.163$, $t = 5.506$, $p = 0.000$), indicating a partial mediating role of faculty development initiatives in the relationship between management style and student outcomes.

Table 9.
Direct and Indirect Effect Hypotheses Testing.

| Hypothesis | Coef. | Se | T value | P values | Decision |
|---------------------------------------|-------|-------|---------|----------|-----------|
| EMS → Student Learning Outcomes | 0.220 | 0.053 | 4.108 | 0.000 | Supported |
| EMS → Faculty Development Initiatives | 0.426 | 0.043 | 9.945 | 0.000 | Supported |
| FDI → Student Learning Outcomes | 0.382 | 0.059 | 6.539 | 0.000 | Supported |
| EMS → FDI → Student Learning Outcomes | 0.163 | 0.030 | 5.506 | 0.000 | Supported |

Note: EMS – Exploitative management style; FDI – Faculty Development Initiatives; Coef. = Coefficient; Se = standard error.

5. Discussion and Conclusion

5.1. Discussion

This study examined the influence of exploitative management style on student learning outcomes in public higher education institutions (HEIs) in Cambodia, with a specific focus on the mediating role of faculty development initiatives. Structural equation modeling using PLS revealed that all hypothesized

relationships ($H1-H4$) were statistically significant. The findings contribute to the broader literature on educational leadership, faculty development, and learning outcomes in resource-constrained higher education systems.

H_1 : The results indicate that exploitative management style (EMS) has a significant positive effect on student learning outcomes ($\beta = 0.220$, $t = 4.108$, $p = 0.000$). Although EMS is often viewed negatively, these results suggest that, in certain structured learning environments, elements such as clear direction, firm control, and focused expectations can actually help students perform better. Moreover, this finding is consistent with the work of Peng and Chen [37] and Chen, et al. [38] who demonstrated that structured teaching and the strategic use of familiar resources both characteristics of exploitative behaviors can enhance learning. Specifically, students benefit when they have a clear understanding of expectations and can build upon previously acquired knowledge. Nevertheless, Schmid, et al. [39] caution that exploitative leadership, if misapplied, may become self-serving or harmful. Therefore, while EMS can support positive outcomes in the short term, excessive use may eventually undermine student motivation and creativity.

H_2 : The strong positive relationship between exploitative management style and faculty development initiatives ($\beta = 0.426$, $t = 9.945$, $p = 0.000$). This suggests that EMS can effectively serve as a mechanism to promote structured professional growth within academic institutions. Supporting this, Dixon, et al. [40] emphasize that exploitative learning, characterized by refinement and efficient knowledge application, contributes to the development of organizational capabilities. Similarly, Pandey and Sharma [41] identify directive leadership and centralized control as organizational factors that facilitate exploitative behaviors, which in turn drive performance improvements. Furthermore, Kjellström, et al. [42] demonstrate that leadership strategies fostering exploitative behaviors through focused training programs enhance overall organizational outcomes.

As H_3 : the positive influence of FDIs on SLOs ($\beta = 0.382$, $t = 6.539$, $p = 0.000$) existing research supports the view that faculty development initiatives contributes to enhanced teaching quality and improved student learning outcomes. Studies by Elliott and Oliver [43] and Steinert, et al. [14] demonstrate that focused professional development initiatives lead to greater instructional effectiveness, ultimately resulting in higher academic achievement among students.

H_4 : The indirect effect of exploitative management style on student learning outcomes through faculty development initiatives was statistically significant ($\beta = 0.163$, $t = 5.506$, $p = 0.000$), indicating partial mediation. This suggests that EMS enhances student outcomes not only directly but also by promoting structured faculty development initiatives. This aligns with Hu, et al. [44] who highlight the mediating role of faculty behavior in educational gains. While EMS is often linked to negative outcomes like alienation [45] or knowledge hiding [46] in this context, its performance-driven nature appears to foster engagement in development, leading to improved teaching and learning outcomes.

5.2. Conclusion

This study demonstrates that the measurement model is both reliable and valid. While the direct effect of exploitative management style is weak, its influence on structured faculty development initiatives is moderate. Overall, the model shows moderate explanatory power, highlighting faculty development as a key pathway linking exploitative management style practices to improved student learning outcomes and the model employed in this study exhibits a good fit. This study reveals that exploitative management style (EMS) positively influences student learning outcomes (SLOs) in Cambodian public higher education institutions, both directly and indirectly through faculty development initiatives (FDIs). EMS promotes structured faculty growth, which enhances teaching quality and leads to improved student performance. These findings highlight the potential of EMS, when applied strategically, to support educational effectiveness in resource-constrained higher education settings.

While the study offers valuable insights into these dynamics within higher education, it also acknowledges certain limitations related to research design, geographic scope, and data collection methods. Future research should aim to address these limitations by employing longitudinal designs, expanding to diverse contexts, and incorporating multiple data sources to further advance the understanding of leadership effectiveness in higher education settings.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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