Perceived Effectiveness of Professional Development Programmes: An Exploratory Factor Analysis (EFA) Approach

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***Abstract*— This study examines how the faculty members of Norbuling Rigter College feel about the programmes for professional development (PD). To uplift themselves, stay up-to-date, strengthen their teaching skills and improve student performances, the faculties must participate in PD programmes. The effectiveness of these programmes may be determined by the factor of how well these programmes satisfy the demands and expectations of the faculties. By administering quantitative methodology and a survey questionnaire using a 4-point Likert scale, this study looks to find the fundamental elements that affect faculty opinions on professional development programmes.**

***Index Terms*— Professional Development, Faculty Development, Perceived Effectiveness, Teacher Learning, Higher Education, Exploratory Factor Analysis, Institutional Support, Teaching Practices, Long-Term Impact**

I. INTRODUCTION

While the education environment is forever changing, it is still quality teaching that forms the bedrock of any form of institutional success. There is increased pressure for higher education institutions (HEIs) to improve teaching practices that enhance student success and meet the demands of the global knowledge economy. These would be realized when professional development programmes emerge as an important strategy in helping faculty members develop their instructional practices, learn about new pedagogical techniques, and inform valuable contributions to the goals of their institutions. PD programmes enable the faculty members to create opportunities for continuous learning to improve their competencies in subject matter, teaching methods, research capabilities, and professional responsibilities. However, despite the widespread adoption of PD programmes at institutions of higher learning, significant differences exist among faculty regarding perceptions in the utility of these programmes. In general, faculty members engage in PD programmeming based on institutional imperatives, personal interests, and external factors such as shifting education policy (Guskey, 2002). Therefore, understanding how faculty conceptualizes programme effectiveness can be informative in supporting appropriate design and delivery of PD programmes that meet their needs and contribute positively to their professional development.

This becomes particularly true because, as stated by (Avalos, 2011), the actual success of PD depends precisely on the relevance and practicality it develops to solve the particular problems of each teacher. However, most of the time, the pattern for these sets of programmes remains the same, which in turn leads the faculty members to receive these with a varying degree of satisfaction and yielding quite inadequate results in the long run. Faculty may find PD particularly effective with regard to relevance of content and networking opportunities but less so with respect to follow-up support or practical applicability. Such perceived disparity again raises significant questions about the design, implementation, and evaluation of higher education PD programmes.

2. IMPORTANCE OF PROFESSIONAL DEVELOPMENT FOR FACULTY

The importance of PD, in this respect, cannot be emphasized enough when it comes to faculty development. In an effort to make students prepared for the rapid changes in professional landscapes, faculty need updating in state-of-the-art methods of teaching, the latest technological tools, and new knowledge in the fields; hence, the importance of faculty development programmes in bridging these gaps. These studies have also displayed how PD

programmes improve instructional practices amongst teachers for better learning by students and also build a sense of collaboration and expertise among educators. As (Borko, 2004) states, in 2004, "I was struck repeatedly by evidence that it had fostered in its participants a sense of community and collective responsibility for teaching and learning". To the faculty, PD offers opportunities for career advancement that go hand in hand with professional satisfaction and institutional recognition.

Considering these possible advantages, there remains the problem of ensuring that PD programmes are designed to achieve maximum effectiveness. As (Desimone, 2009) argues, most such programmes lack sustained engagement, institutional support, or alignment with actual faculty needs. Even more importantly, a substantial body of research suggests that, unless ongoing support and reflection occur, PD programmes may provide a temporary boost, but longer-term impacts on teaching practices are less common with some few exceptions (King, 2014).

3. GAPS IN PERCEPTION OF PD EFFECTIVENESS

A central issue in the discourse on PD programmes is how the intended outcomes of these programmes actually flow from them and how they serve the faculty members. According to (Guskey, 2002), PD programmes can give rise to meaningful change only when they are structured in a way that provides teachers with clear, measurable outcomes, as well as ongoing opportunities for professional reflection. However, many faculty members report that PD programmes appear to be disconnected from daily teaching or lack the depth required to ensure long-term changes in practice. This lack of congruence between programme design and usefulness is a consistent refrain in the literature (Avalos, 2011).

More importantly, (Cohen & Hill, 2008) are of the opinion that PD programmes have the maximum potential to enhance the outcome of an endeavor if there is coherence with the broad institutional goals about what students should learn and in what ways the faculty are supported in using new knowledge or skills. The perceptions of faculty members regarding the effectiveness of PD programmes depend on various factors such as the relevance of the content that is being addressed, collaboration happening, and availability of institutional resources to implement what is learned. Each of these factors varies across departments and disciplines but also even among the faculty themselves. No true calculation of the success of such PD programmes can be achieved while disregarding these very unique perspectives of the participants themselves.

4. PURPOSE OF THE STUDY

While most research on PD tends to focus on the programme’s structure and content, very few have used quantitative techniques to examine the multiple factors that could impact faculty perceptions of PD efficacy. As a consequence, this study sought to resolve this missing link by using an exploratory factor analysis (EFA) to uncover unseen shared factors that influence faculty perceptions of PD programmes in a college setting. This study explores the factors that make PD programmes effective from faculty members' perspectives in terms of relevance to content, facilitator quality, delivery of the programme, impact on teaching practices, and institutional support. In return, through this research, college will get valuable insights on how they can enhance incentives for teacher engagement and sustain effective teaching practice by customizing the PD and further enable college to tailor the PD programmes. When the PD programmes are more in tune with the needs of the faculty and institutional objectives, colleges and universities can foster an environment that is conducive to learning through continual improvement in teaching methods and pedagogy.

The main objectives of the study are to:

Establish the critical factors that influence faculty perception of professional development programme effectiveness.

Examine how these factors differ across different demographics of the faculty, including teaching experience and academic discipline.

Make specific recommendations to strengthen the design and delivery of the PD programmes so as to achieve more favorable outcomes on teaching practices.

5. RESEARCH QUESTIONS

The study is guided by the following research questions:

1. How do faculty members perceive the overall quality of PD programmes provided by NRC?
2. What specific aspects of PD programmes (e.g., content, delivery methods, facilitators, and relevance to teaching practices) do faculty find most effective or ineffective?
3. How do faculty perceptions of PD vary based on demographic variables such as years of experience, discipline, or employment status (e.g., full-time vs. part-time)?
4. What factors (e.g., institutional support, availability of resources, and relevance to career growth) influence faculty participation in and satisfaction with PD programmes?

6. SIGNIFICANCE OF THE STUDY

This study adds to the literature on higher education faculty development by exploring the perceived effectiveness of PD programmes from the perspective of the faculty members. Additionally, lessons from this study that could be useful in the effort to design more responsive PD programmes by HEIs to their faculties' needs and help ensure that such initiatives yield improvements that are measurable both in the quality of teaching and learning and student outcomes. Whereas EFA takes faculty perceptions and teases out the underlying factors, thus offering a more robust base for further research in the area of PD effectiveness.

7. BACKGROUND OF THE STUDY

To improve the faculty competencies, fostering new teaching techniques and improving student results, the colleges can implement PD programmes. An effective PD programme can facilitate a dynamic and adaptable learning environment. This can uplift the faculties, stay up-to-date, strengthen their teaching skills and improve student performances. However the effectiveness of these programmes may be determined by the factor of how well these programmes satisfy the demands and expectations of the faculties.

A number of studies had been done in demonstrating how crucial is ongoing PD programmes in establishing a culture of high quality instruction and learning. The PD programmes that are content-relevant, context-specific and incorporating active learning elements are having a positive influence on teaching methods (Desimone, 2009). Even with the acknowledged advantages, there is still a lack of knowledge regarding faculty perceptions of these programmes' efficacy, especially with regard to the relevancy of the content, the delivery strategies, and the calibre of the facilitators, institutional support, and the programme's overall influence on teaching practices.

8. LITERATURE REVIEW

8.1 Professional Development and Teacher Effectiveness

Among the concerns of educational research has been the impact of professional development programmes, especially how such programmes influence teacher knowledge, skills, and instructional practices. In her comprehensive review, (Avalos, 2011) underlines that PD programmes indeed greatly contribute to teachers' instructional capacity provided they are done in conformity with the needs and contexts of the teachers. That is important because her work underlines the role of teacher-centered programmes with reflection, collaboration, and ongoing learning. Indeed, according to Avalos, while the number of PD initiatives has grown through these years, their long-term impact is mixed depending largely on how the programmes were implemented and supported by institutions.

Consequently, (Borko, 2004) highlights further complicating factors considered about PD and teacher learning. She argues that while most types of PD focus on improving practice, such programmes realize varying degrees of success based on its structure, content, and mode of delivery. Borko emphasizes that PD programmes should be other than single-workshop events but rather sustained, collaborative, and practice-based teacher learning processes. This analysis also articulates that programmes incorporating peer learning and reflection bring greater and longer-lasting changes in teaching practices.

8.2 Factors Affecting PD Effectiveness

(Desimone, 2009) helps to organize thinking about the key elements of effective PD programmes. She identifies five core features of successful PD programmes including: (1) content focus, (2) active learning, (3) coherence, (4) duration, and (5) collective

participation. Desimone asserts that professional development programmes with a sharp focus on subject matter content-and how students learn that content-produce better outcomes. Moreover, programmes incorporating active learning-role-playing, observing peers teach, or viewing student work-yield much greater improvements in teaching practice. Desimone's model has been widely used in evaluating PD programmes and can be viewed as providing a sound theoretical framework from which factors influencing faculty perception about the effectiveness of PD can be analyzed.

In a study that investigated PD in higher education, (King, 2014) explores how faculty members perceive the long-term benefits of the PD events in which they participate. King's findings were that faculties are more likely to perceive the PD experience as effective when there is perceived linkage between programme content and teaching responsibilities. Her findings show that for PD programmes to actually work, they need to address the specific challenges faced by faculty in various disciplines. She further stated that "programmes which are supported continuously and followed up are likely to create sustained changes in teaching behavior."(Guskey, 2002), pressed this further when he argued that, in fact, the effectiveness of PD programmes is realized when these programmes have a follow-up process that is aimed at encouraging reflection and feedback opportunities.

8.3 Exploratory Factor Analysis in PD Research

EFA has been used in various studies to explore the underlying dimensions that define PD effectiveness. (Cohen & Hill, 2008) employed factor analysis to analyze how features of a PD programme relate to teacher learning outcomes; their findings indicate that those PD programmes focused on specific content knowledge and aligned with broader school policies are more likely to lead to greater impact in teacher performance. Their study confirms that the programmes of PD have been coherent with institutional goals and that organization promotes the continuous development of teachers.

In the similar quantitative analysis, (Ingvarson et al., 2005) present a large-scale study that uses EFA for the investigation of teachers' perception of PD programmes in relation to their professional development. They came to the following conclusion that teachers' perceptions depended on three factors: "(1) the content of the programme and its relevance to their own teaching; (2) the opportunity to collaborate with other teachers in the programme; and (3) institutional support to use new practices in their classrooms." In general, the findings agree with the trend that the best PD programmes were those that gave teachers practical tools and resources to use in the classroom.

8.4 Long-Term Impact of PD on Teaching Practices

One of the most cited studies on PD effectiveness is that of (Garet et al., 2001) where they used a large data set to explore the characteristics of mathematics and science PD programmes that were associated with teacher practice and student achievement gains. Their findings add further support to the notion that PD programmes are most effective if they are content focused, of substantial duration, and involve active learning. They also identified that among these, PD programmes featuring collaborative learning combined with continuous reflection made the most significant difference in teachers' practices. The study by Garet et al. justifies PD programme design that ensures sustained collaboration and engagement among the teachers.

Whereas (Opfer & Pedder, 2011) take a systems approach to understanding the PD effectiveness. They said that the impact of the PD programmes on teacher learning can't be conceptualized in isolation. They say that consideration needs to be made in regard to the wider educational context as far as institutional policies, leadership support, and resources are concerned. Their research underlines that a more comprehensive way of looking at the evaluation of PD programmes is needed that takes into consideration the different factors influencing teacher learning and professional growth.

8.5 Gaps in the Literature

While many studies have been carried out in terms of the design and delivery of the PD programmes, there is still ample scope for further research on the perceptions of faculty about these programmes in general, but most specifically in higher education settings. Much of the research targeting school improvement has focused on K-12 settings, with only limited studies addressing the specific challenges for higher education faculty. In fact, only a few research works have applied the approach of EFA in order to

investigate the factors particularly contributing to faculty perceptions of PD effectiveness. The current study tries to fill this gap by using EFA to explore the dimensions associated with effective PD programmes by faculties.

9. METHODOLOGY

9.1 Research Design

The present quantitative research uses an EFA method wherein faculty perceptions are recorded on a four-point Likert scale representing effectiveness. A structured questionnaire with a set of Likert-scale items ranging from 1 = Strongly Disagree to 4 = Strongly Agree was designed to map different dimensions of the PD programmes, such as content, delivery, institutional support, and the influence created thereof in the long run.

9.2 Participants

The target respondents were the faculty members from different academic departments at Norbuling Rigter College, Paro, Bhutan. All the faculties were invited to participate in the survey. A total of 45 usable responses were received from them, which accounts for a response rate of 90%.

9.3 Data Collection

The primary tool for data collection in this study was a structured survey questionnaire designed to assess faculty perceptions of the effectiveness of PD programmes. The survey consisted of two sections:

Section 1: Demographic Information

This section gathered background information about the respondents, such as their department or discipline, years of teaching experience, employment status, and frequency of participation in PD programmes over the past year. This data helped to identify patterns and variations in perceptions across different faculty subgroups.

Section 2: Likert Scale Items

This section included approximately 32 items on a 4-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree) that measured various dimensions related to the perceived effectiveness of PD programmes. These dimensions included content relevance, quality of facilitators, programme delivery, impact on teaching practices, institutional support, accessibility, perceived long-term impact and overall satisfaction.

The survey was administered through a printed questionnaire.

9.4 Data Analysis and Preparation

After completing the data collection, the exporting of the survey responses from the survey platform to statistical software such as Jamovi and MS Excel for analysis was carried out. For maintaining the integrity of the data, an exhaustive cleaning procedure, such as searching for incomplete responses, completing any missing data, and normalizing the responses were thoroughly conducted. After that, descriptive statistics, i.e., the mean, median, and standard deviation, were calculated to have a general idea of the dataset.

For this research, the researcher used Exploratory Factor Analysis (EFA) as the primary method. Using this approach, researcher was able to identify the underlying structure of the observed variables and access the underlying factors that may influence faculty perceptions of whether professional development (PD) programmes are effective or not. Also computed Cronbach's Alpha in order to identify the internal consistency and reliability of the scale. EFA was conducted using principal axis factoring with oblimin rotation, which allowed the researcher to have an in-depth knowledge of the relationships within the data.

10. RESULT

10.1 Reliability Analysis

Cronbach's Alpha:

The internal consistency, measured through the Cronbach's Alpha test, scored an impressive 0.897, which signifies an excellent level of reliability. This robust score firmly indicates that the items within the scale are not only dependable but also work cohesively to consistently assess the specific construct in question. Such high reliability assures that the measurement effectively captures the nuances of what is being evaluated, providing confidence in the results.

10.2 Data and Assumption Checks

Adequacy of Sample Size (KMO Measure)

The Kaiser-Meyer-Olkin (KMO) Sampling Adequacy Measure for the data is a whopping 0.819, much above the minimum benchmark of 0.6. This certainly assures

us that the data are extremely well-adapted to factor analysis. Moreover, each and every individual KMO statistic for each variable ranges from 0.721 to 0.877, each one well above the 0.7 mark, further establishing the data's appropriateness for this analysis.

Bartlett's Test of Sphericity:
Also, Bartlett's test of sphericity returned a significant result with a chi-square statistic value of $\chi^2 = 165$, degrees of freedom (df) = 28, and p-value of less than 0.001. This is an indication that the correlation matrix is not an identity matrix and therefore an indication that there are indeed significant correlations between the variables and therefore support for the applicability of factor analysis.

10.3 Factor Extraction
The EFA revealed a single factor that explained 56.3% of the total variance in the data. Factor loadings and uniqueness values for each item are presented below:

Factor Loadings	Factor 1	Uniqueness
Content Relevance and Applicability	0.802	0.356
Quality of Facilitators and Resources	0.478	0.772
Programme Delivery and Format	0.800	0.360
Impact on Teaching and Learning Practices	0.841	0.293
Institutional Support and Incentives	0.432	0.814
Accessibility and Inclusivity	0.809	0.345
Perceived Long-term Impact	0.799	0.362
Satisfaction and Engagement	0.896	0.198

Note. The method used was 'Principal axis factoring' extraction in combination with an oblimin rotation

10.4 Factor Loadings:
All items, except for Quality of Facilitators and Resources (loading = 0.478) and Institutional Support and Incentives (loading = 0.432), loaded strongly onto the single factor (loadings > 0.7). High loadings for the items mean these items are also strongly related to the underlying factor: Perceived Effectiveness of PD Programmes.

10.5 Uniqueness:
This ranged from 0.198 to 0.362 for items, indicating that a substantial proportion of their variance is accounted for by the factor extracted, Content Relevance and Applicability, Programme Delivery and Format, Impact on Teaching and Learning Practices, Accessibility and Inclusivity, Perceived Long-term Impact, and Satisfaction and Engagement. Items Quality of Facilitators and Resources and Institutional Support and Incentives had higher uniqueness values, 0.772 and 0.814 respectively, which may indicate that they shared less variance with the common factor and would thus become candidates for refinement or exclusion in future analyses.

10.6 Model fit

Model Fit Measures							
	RMSEA 90% CI				Model Test		
RMSEA	Lower	Upper	TLI	BIC	χ^2	df	p
0.0865	0.00	0.186	0.940	-44.8	25.7	20	0.176

The corresponding RMSEA value of 0.0865 was accompanied by a 90% confidence interval ranging from 0.00 to 0.186. Although the RMSEA value is less than the threshold of 0.08 normally considered acceptable, this confidence interval's upper limit is greater than 0.10; thus suggesting possible improvements in model fit.
The TLI value, 0.940, is close to 1, which indicates a very good fit for the model.
The BIC value of -44.8 strongly supports the model. The smaller the BIC value, the better the fit; the negative sign reassures us more about the sufficiency of the model.

11. DISCUSSION

The current study, therefore, attempts to explore the constructs underlying faculty perceptions of the effectiveness of PD programmes by using a survey on a 4-point Likert scale. EFA results have shown that items of the survey have indicated, to a great extent, one latent factor that explains 56.3% of the variance in data. The finding indicates that faculty perceive many elements of the PD programmes-satisfaction and

engagement, impact on teaching and learning practices, accessibility & inclusivity, relevance of content, and the delivery of programmes-all interrelated parts of the overall effectiveness.

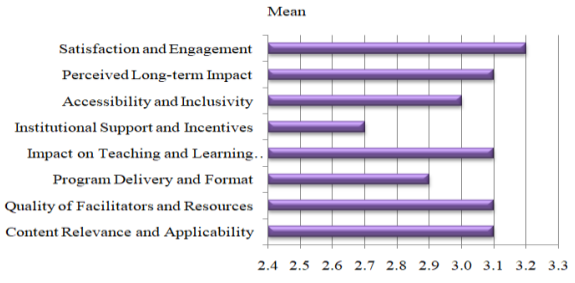
Reliability Analysis showed that the scale used was highly reliable with a Cronbach's Alpha of 0.897, hence having strong internal consistency, and therefore the items collectively measure a unified concept. The KMO Measure of Sampling Adequacy was 0.819, while the sphericity of Bartlett's Test of Sphericity was $\chi^2 = 165$, $p < 0.001$, hence the data was suitable for factor analysis.

Whereas the factor loadings for most items were strong, indicating that they align with the underlying construct, two items had much lower factor loadings and higher uniqueness values: Quality of Facilitators & Resources and Institutional Support & Incentives. This suggests these items reflect the main factor-PD programme effectiveness-only poorly or that they constitute separate dimensions that are poorly represented in this analysis. These results raise particular concern for wording and structural issues to be carefully considered in the future revisions of the survey instrument.

Model fit was relatively good, with the RMSEA estimate being 0.0865 and the TLI being 0.940. There is, however, considerable room for improvement in both with these statistics. The lower-bound RMSEA confidence interval also varied somewhat, indicating that while the single-factor solution is acceptable, it is not particularly good at capturing the underlying dimensions of effectiveness in a PD programme.

These results suggest that faculty view the PD programmes holistically-that is, content, delivery, and accessibility & inclusivity are strongly interrelated. At the same time, the relatively low factor loadings of two of the items would suggest further additional latent factors beyond the ones captured in this single-factor solution.

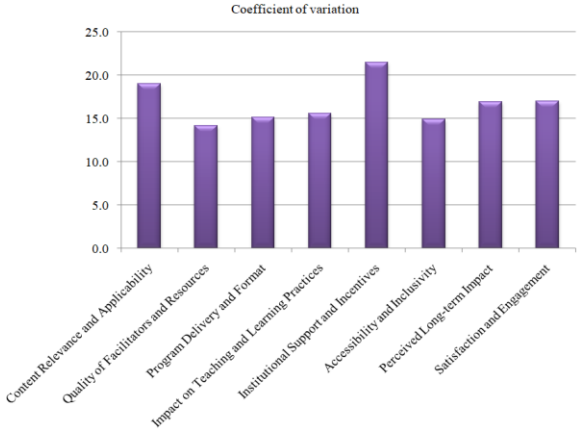
12. DESCRIPTIVE ANALYSIS



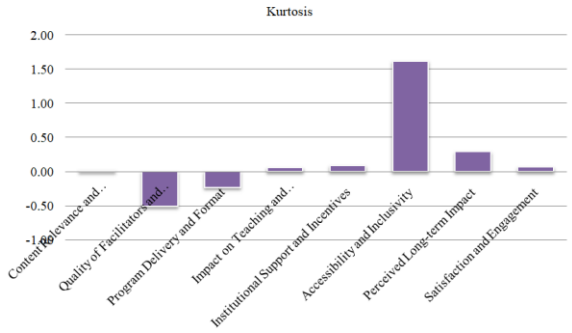
Most of the variables here have means around 3.0 to 3.2, indicating that overall participants agree with the statements concerned with the effectiveness of the programme in various dimensions. The highest mean of 3.2 is for Satisfaction and Engagement, which shows that participants are somewhat satisfied and engaged in the PD programmes, though many likely lean toward "Agree" or even "Strongly Agree.".

Other means of approximately 3.1 regarding the content relevance, facilitators' quality, impact on teaching practice, and perceived long-term impact are indicative that for most of the participants, the content was relevant, facilitators effective, and the impact on their teaching practice positive.

The category Institutional Support and Incentives had the lowest mean, which was 2.7, and this simply means that generally, participants have not agreed with the adequacy of institutional support. It reflects dissatisfaction among participants, and there is a feeling among many that the institution's support and incentives may not be adequate.



For most variables, the level of coefficient of variation is moderate, ranging between 14% and 18%, which indicates considerable agreement over responses. Institutional Support has the most variability; hence the widest range of experiences or considerations concerning the support on the part of the institution, with a variation of 21.53%. That would imply that support or incentives are available to faculty in a very inconsistent manner. The lowest coefficient of variation values are found for Quality of Facilitators and Accessibility and Inclusivity, indicating that most participants perceive these facets similarly and agree persistently on their effectiveness.



The prominent variables reflect kurtosis close to zero, which suggests that the responses are normally distributed with no remarkable peaks. In contrast, Accessibility and Inclusivity have high kurtosis, as measured at 1.62, to indicate that there was a denser distribution where many respondents gave similar ratings presumably around the "Agree" rating of 3, and few gave extreme ratings of either 1 or 4. This could indicate there is a shared feeling of accessibility and inclusivity perhaps indicative of shared experience. The qualities of facilitators (-0.51) and programme delivery (-0.23) are negatively kurtotic, meaning they are more spread out as a distribution and hence represent a wider scope of outlook.

Variables	Skewness
Content Relevance and Applicability	-0.3193
Quality of Facilitators and Resources	-0.0233
Programme Delivery and Format	-0.0478
Impact on Teaching and Learning Practices	-0.0001
Institutional Support and Incentives	-0.5532
Accessibility and Inclusivity	-0.3617
Perceived Long-term Impact	-0.3268
Satisfaction and Engagement	-0.1936

Most of the variables are negatively skewed, which indicates that the responses tend to high ratings, particularly huddled around 3 and 4. Satisfaction, Engagement, and Content Relevance show minor negative skewness; that is, participants generally agree or strongly agree with those constructs. Institutional Support has the highest negative skewness at -0.55, indicating that even though the general score is relatively lower, some participants gave institutional support much lower scores than the average while a few scored it well above average.

13. CONCLUSION AND RECOMMENDATIONS

The present study developed the underlying structure of the perceptions of faculty members regarding how Professional Development programmes are effective. Results indicated that faculty perceptions primarily emanate from a single latent factor founded on the overall quality and relevance of PD programmes. This one factor captures things like the relevance of content, impact on teaching learning practices, programme delivery, and general satisfaction.

The high reliability of the scale and strong factor loadings for most items can explain the appropriateness of the survey instrument in measuring perceptions of PD programmes. However, the lower loadings and higher uniqueness for some items suggest that future iterations of the survey should be refined to better capture nuances or distinct dimensions of PD programme effectiveness.

In other words, the findings have framed the delivery of quality and relevant PD programmes as important to ensure that faculty are positively engaged and satisfied. These results at least partly indicate the ongoing need for improving the survey instrument in terms of its ability to capture all relevant dimensions of programme effectiveness.

The study further calls for the refinement of the survey items to more precisely capture the unique elements of Professional Development programme effectiveness. Although the present analysis demonstrated an unusually robust single-factor structure, further consideration of collaboration and networking opportunities, engagement and motivation, and support for career advancement would give a more complete picture. Future studies might want to make refinements on items with lower factor loadings, such as - facilitators and resources' quality and institutional support - so these items are fully congruent with the latent factors. These would involve the extension of the survey instrument to include these dimensions, conducting longitudinal studies that trace changes in perceptions through time, and using Confirmatory Factor Analysis to validate the revised factor structure.

14. OVERALL SUMMARY

As rated by participants, the in-service PD programmes seemed to be quite effective, specially on aspects such as Satisfaction and Engagement, Content

Relevance, and the Facilitator Quality. The average scores for most aspects were about 3, which shows broad consensus on the programme's effectiveness. However, Institutional Support and Incentives raise some apprehension as can be judged from their lower mean score of 2.7, which reflects disagreement or discontent over the issue.

The moderate variability suggests reasonable consistency in participants' perceptions. However, Institutional Support shows the most variability, indicating uneven experiences across the board. The very negative values of skewness and very small kurtosis close to zero for most variables may indicate that the responses are relatively well balanced but slightly inclined towards positive perception. In this case, Accessibility has a higher concentration of similar responses.

In summary, although the prevailing assessment of the professional development programmes is positive, with large numbers of participants citing relevance, effectiveness, and quality of delivery, there is much room for improvement in regard to the areas of Institutional Support and Incentives, where more negative and inconsistent responses were recorded.

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