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Perceptions of Departmental Heads, Faculty Members and Students Regarding the Effectiveness of Junior Faculty Development Programs in HEC

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Abstract

This study has been conducted to assess the general perception of departmental heads, faculty members and students of public/ private universities of Punjab about the effectiveness of junior faculty development programs, being conducted in higher Education institutions of Punjab for novice teachers with a special focus to determine the various factors that contribute to the need of university teachers' professional development especially the novice like lecturers. The study dealt with three major groups of respondents; Heads of the Departments, Teachers (junior + senior), and students. It was a quantitative research and the sample of the study was Head of Departments, students and faculty members of twelve public and private universities of Punjab selected randomly. Multi- phase sampling was used to divide the population into three groups. Survey method was used and Data was collected by using a closed-ended five point likert scale questionnaire. The findings of the study were drawn from data analyzed using descriptive and inferential statistics. All types of analysis confirm that the whole faculty has more deficiency in expertise in usage of technology in teaching and has less deficiency in classroom Teaching Techniques, content Knowledge, Skills for teaching training Programs and Junior faculty lacks more in content knowledge, classroom Teaching Techniques and skills for teaching training programs. The results also showed that Faculty Development programs are beneficial for enhancement of productivity and improve the competency of new lecturers and also proposed by them that such kind of programs should be on regular basis and also should be compulsory.

Keywords: *Faculty Development Programs, Higher Education Commission, Perceptions of Heads, Teachers and Students Regarding Programs, Effectiveness of Programs*

Introduction

Teachers play prime role in the survival, growth, and progress of any nation. Infect, they are the primary foundation of any country's educational pyramid. Nations, those have competent and responsible teachers gain sublimity and consolidation quite rapidly (Slavin, R. E., 2019). Researchers and educationists agree that teachers have an extraordinary influence on students, through their pedagogy. With the rapid evolution of educational goals, content selection, and learning outcomes, the role of teacher has also changed along with pedagogical styles (Shah, U., Khan, & et, al, 2019).

However, Sethy, S. S. (2018), revealed that the appointments of faculty members in higher education are due to their subject-area knowledge, and not based on their professional knowledge and most of them have never been equipped with teaching methodologies and teaching strategies**.** Although, several studies described that, the most sophisticated content knowledge does not make the best teaching professors hence the best teaching professors are those who have full command on their course material, and be ready to fulfill their ongoing commitment to the process of teaching and learning (Sciuchetti, M. B., & Yssel, N. (2019).

Dilshad, M. et al., (2019) concluded that teachers can report change in their teaching in the classroom only if they are equipped with the latest teaching techniques and strategies through high quality professional development programs. The result of several recent studies also stressed that professional development programs for junior academic faculty played a pivotal role in developing

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scholarship, instructional excellence, and innovative organizational capacities (Orland-Barak, L., & Wang, J., 2020) and it functions as a driving force for developing academic vitality in educational institutions by focusing on the competencies required for teachers (Ajani, O. A., 2019).

Thus (Sengupta, A., 2019), has explained that junior faculty development approaches became an indispensable plan and important element for the survival of higher education institutions in the latest scenario and professional development and depth of teacher change have tangible relation (Mohlakoana, M. n. P., 2019).

Literature Review

Nature of Faculty Developments

Literature defines junior faculty development in multiple ways such as, inculcation of the instructional skills, enhancing teaching practices and strength of the faculty members (Prenger, R., et, al. 2019). One of the former researchers, (Memon, M. (2007), narrated that junior faculty development activities were wide range professional and skill oriented activates those designed to enhance, renew and help faculty in their programs, teaching practices, administration and research (Zepeda, S. J., (2019). Infect, faculty development can be explained as such programs or activities that increased faculty skills and competencies and exalted their values and motivation (Wozniak, K., 2020).

Voogt, J., & Pieters, J. (2018), highlighted that junior faculty development programs are such activities that are designed to make the faculty ready for their teaching role by improving their administrative, research/scholarship and management abilities (Ricard, M., & et.al. 2020). In fact a number of studies concluded that professional development programs have the main goal to develop the quality of teaching practices of junior faculty by facilitating them in their assigning role and enable them best teacher by increasing their teaching competencies (Ventayen, R. J. M., 2019).

Similarly, Köse, M. F., & Korkmaz, M. (2019), explained that the focus of a comprehensive faculty development programs are to develop abilities and productivity of junior faculty, which would be caused in decreased stress, increased job satisfaction, and enhanced recruitment, retention, and entire success (Moya, B., Turra, H., & Chalmers, D. (2019). Moreover, Raza, H., & et, al. 2019, revealed the dominated perception that junior faculty development was the most beneficial and crucial track for constant and forever success of faculty members.

Procedure of Faculty Development

Faculty development procedure and programs based on such decisions, strategies, and actions which are followed by approaches, activities and plans and are pursued by rewards, incentives, evaluation and feedback (Podolsky, & et, al. 2019). And can only be fruitful if these are initiated at the same time both at individual and institutional level (Smith, B., & et, al. 2020).

Need of Faculty Development

A large number of studies those dealt with views and opinions of departmental heads strongly underpinned that professional development is a vital element to the survival and growth of higher education systems and it became essential for higher education. (Brown, A. L., & et, al. 2017, reported that departmental heads indicated high to very high level need for faculty development and therefore to meet this up level need junior faculty development approaches should be designed and implemented carefully to face the upcoming various threats (Ali, H. (2019).

Cushman, C. A. (2019), suggested that it is essential for teachers to keep on their lifelong learning and transforming through continuous development of their pedagogical and instructional skills, comprehension of content knowledge, etc. and disseminating and inculcating same to their students. To keep abreast themselves with the changing and latest developments in their fields and subjects areas, they must use all possible sources, media, mode and met HoDs to improve their scholarship and expertise and they have to acquainted with latest communication skills and technologies (Leal Filho, W., & et.al. 2019).

Infect, the nation also has very high expectations from the teachers of universities, as they are considered responsible for the provision of high quality work force for the development of the country (Donnelly, P., 2019). However, despite a very high degree of government interest for these quantitative achievements at university level, the ground realities show serious qualitative deficiencies countering the realization of national expectations (Farrukh, M., & et, al. 2019).

Objective of the Study

- Determine the need of junior faculty development at universities of Punjab as perceived by HoDs, faculty members and students.
- To see the significant difference of opinion among the departmental heads, faculty members and students.
- To see the significant difference over the need for faculty development among respondents in terms of gender and experience

Methodology

Research Design

It was a quantitative research which was conducted through survey method. Data was collected by using a closed-ended five point likert scale questionnaire. 1700 questionnaires were distributed and 1648 were received but data of 1606 questionnaires were found correct.

Population

Population of study was the universities of the Punjab. Total number of Universities of Punjab =55 (public = 31 +private = 24)

Sample

12 universities were selected on the bases of equal volume for collection of data randomly. The study dealt with three major groups of respondents; Heads of the Departments, Teachers (junior + senior), and students.757 (47%) participants were male and 849 (53%) participants were female which makes total 1606 participants. Eight hundred eight (51%) participants belonged from public sector while 798(49%) participants belonged from private sector. About 707 (44%) participants were students and 719(45%) were faculty members and 180(11%) participants were head of department in their field. Three hundred sixty six (23%) participants had experience of less than 5 years, 533(33%) participants had experience of more than 5 years and those participants which had no experience were 707(44%). In this research the 360 (22%) participants were junior, 359(22%) were senior and 887(55%) were students & HoDs.

Sampling

Multi- phase sampling was used to divide the population into three groups. The researcher developed a questionnaire with close reference to the literature and variables. The variables that were to testify for this study are as follow:

1. Expertise in Teaching Technology
2. Classroom Teaching Techniques
3. Content Knowledge of Teachers
4. Mode of Faculty development programs
5. Skills for teaching training Programs

Literature was explored to find out the best suitable items to testify in each variable. Thus the questionnaire responds to all the possible variables in the light of the literature review. The researcher added 31 items to the variables to find out the lacking in the teaching and the perceptions about the modes of professional development.

Analysis and Interpretation of Data

The data was analyzed based on all participants i.e. Students, Faculty and HoDs. Further this data was analyzed on the basis of demographic variables i.e. Gender, type of university and experiences of participants. The results of the study were presented in the form of tables following the interpretation of the tables.

Table 1

Population Tally of the respondents

Variables	***f***	***%age***
Gender		
Female	849	53
Male	757	47
Sector		
Public	808	51
Private	798	49
Participants Status		
Students	707	44

Faculty members	719	45
Head of department	180	11
Experience		
<5 years	366	23
>5 years	533	33
No exp. (students)	707	44
Seniority		
Junior	360	22
Senior	359	22
Students &HoDs	887	55

Values of the above table shows the demographic information of the participants. Table shows that there were 53% females and 47% were males, 51% respondents were from public and 49%from private sector, 44% were students, faculty members were 45% and 11% were head of department, 23% respondents were with <5years and 33% respondents were > 5 years and 44 % students students were with no experience, 22% juniors and seniors, students and HoDs were 55% for the responses.

Table 2

Comparison of students, teachers and HoDs, on statements of questionnaire

Faculty lack in	**Students**		**Teachers**		**HoDs**			
	M	*SD*	*M*	*SD*	*M*	*SD*	*F*	*P*
Whole faculty expertise in Teaching Technology	5.30	1.05	5.34	1.00	5.37	1.07	0.50	0.607
Whole faculty classroom Teaching Techniques	4.32	1.03	4.38	1.08	4.33	1.04	0.57	0.567
Whole faculty content Knowledge of Teacher	3.47	0.60	3.49	0.59	3.46	0.59	0.50	0.609
Whole faculty Mode of Faculty development programs	4.58	0.66	4.59	0.61	4.57	0.65	0.10	0.907
Whole faculty Skills for teaching training Programs	4.58	0.63	4.58	0.63	4.57	0.62	0.02	0.985
Junior faculty expertise in Teaching Technology	3.47	0.66	3.50	0.72	3.44	0.71	0.64	0.525
Junior faculty classroom Teaching Techniques	5.49	0.48	5.51	0.47	5.48	0.46	0.39	0.675
Junior faculty content Knowledge of Teacher	5.83	0.41	5.84	0.42	5.83	0.42	0.31	0.733
Junior faculty Mode of Faculty development programs	5.26	0.66	5.22	0.65	5.19	0.59	1.30	0.273

Table 2 shows that a one-way ANOVA was conducted to find significance difference in students, teachers and HoDs' perception about faculties' deficiencies. According to the values, there was no significant difference on the basis of perception of students, teachers and HoDs.

Table 3

Comparison of participants on the basis of different experience regarding factors of faculty development

Faculty lack in	**<5 years**		**>5year**		**No. exp.**			
	M	***SD***	***M***	***SD***	***M***	***SD***	***F***	***P***
Whole faculty expertise in Teaching Technology	5.35	0.99	5.35	1.03	5.30	1.05	0.47	0.627
Whole faculty classroom Teaching Techniques	4.42	1.08	4.34	1.07	4.32	1.03	1.04	0.354
Whole faculty content Knowledge of Teacher	3.51	0.60	3.47	0.58	3.47	0.60	0.86	0.424
Whole faculty Mode of Faculty development programs	4.60	0.57	4.58	0.64	4.58	0.66	0.17	0.848
Whole faculty Skills for teaching training Programs	4.58	0.64	4.58	0.62	4.58	0.63	0.00	0.998
Junior faculty expertise in Teaching Technology	3.53	0.72	3.46	0.71	3.47	0.66	1.33	0.266

Junior faculty classroom Teaching Techniques	5.48	0.49	5.51	0.46	5.49	0.48	0.53	0.587
Junior faculty content Knowledge of Teacher	5.86	0.42	5.82	0.42	5.83	0.41	1.28	0.278
Junior faculty Mode of Faculty development programs	5.21	0.64	5.22	0.63	5.26	0.66	1.14	0.320

Table 3 shows that a one-way ANOVA was conducted to find significance difference in students, teachers and HoDs' perception about faculties' deficiencies on the basis of their experience. The values show, there was no significant difference on the basis of different experience regarding factors of faculty development.

Table 4

Comparison of Male and female participants on factors of faculty development

Faculty lack in	**Female**		**Male**		**Independent Sample-test-test**		
	M	***SD***	***M***	***SD***	***t***	***P***	**Cohen-d**
Whole faculty expertise in Teaching Technology	5.33	1.02	5.33	1.04	0.07	0.941	0.00
Whole faculty classroom Teaching Techniques	4.35	1.05	4.34	1.06	0.25	0.800	0.01
Whole faculty content Knowledge of Teacher	3.49	0.59	3.47	0.59	0.59	0.558	0.03
Whole faculty Mode of Faculty development programs	4.58	0.63	4.58	0.64	-0.20	0.839	0.00
Whole faculty Skills for teaching training Programs	4.62	0.62	4.55	0.64	2.23	0.026	0.11
Junior faculty expertise in Teaching Technology	3.47	0.70	3.48	0.68	-0.44	0.663	0.01
Junior faculty classroom Teaching Techniques	5.49	0.47	5.50	0.48	-0.77	0.439	0.02
Junior faculty content Knowledge of Teacher	5.86	0.41	5.81	0.42	2.35	0.019	0.12
Junior faculty Mode of Faculty development programs	5.27	0.63	5.21	0.66	1.84	0.066	0.09

Table 4 shows that an independent t-test was run to find significance difference in students, teachers and HoDs' perception about faculties' deficiencies on the basis of their gender. The values show, there was no significant difference in the Mode of faculty development programs, content knowledge of teachers and skills for teaching training program on factors of faculty development. Whereas other questions present significant difference on factors of faculty development.

Table 5

Comparison of HoDs, junior teachers, senior teachers and students on statements of questionnaire

Faculty lack in	**Junior**		**Senior**		**t-test**		
	M	**SD**	**M**	**SD**	**t**	**p**	**Cohen-d**
Whole faculty expertise in Teaching Technology	5.34	1.05	5.35	0.95	-0.12	0.901	0.01
Whole faculty classroom Teaching Techniques	4.34	1.08	4.42	1.09	-0.92	0.356	0.07
Whole faculty content Knowledge of Teacher	3.50	0.61	3.48	0.57	0.40	0.692	0.03
Whole faculty Mode of Faculty development programs	4.59	0.61	4.59	0.60	-0.06	0.955	0.00
Whole faculty Skills for teaching training Programs	4.57	0.63	4.60	0.63	-0.60	0.546	0.05
Junior faculty expertise in Teaching Technology	3.51	0.70	3.48	0.74	0.51	0.610	0.04
Junior faculty classroom Teaching Techniques	5.50	0.46	5.51	0.48	-0.04	0.968	0.02
Junior faculty content Knowledge of Teacher	5.85	0.42	5.84	0.43	0.39	0.697	0.02
Junior faculty Mode of Faculty development programs	5.26	0.64	5.18	0.66	1.68	0.094	0.12

Table 5 shows that an independent sample t-test was conducted to find significance difference in students, teachers and HoDs' perception about faculties' deficiencies on the basis of their rank; junior and senior. The values show, there was no significant difference among HoDs, junior teachers, senior teachers and students on statements of questionnaire.

Table 6

Comparison of the whole faculty and junior faculty

Needs for Faculty Development Programs	***Whole faculty***		***Junior faculty***		***Paired samples t-test***		***Effect size***
	M	***SD***	***M***	***SD***	**T**	**P**	**Cohen-d**
Expertise in Teaching Technology	5.33	1.03	3.48	0.69	61.8	<001	2.11
Classroom Teaching Techniques	4.35	1.06	5.49	0.47	-39.4	<001	1.39
Content Knowledge of Teacher	3.48	0.59	5.83	0.42	-133.3	<001	4.59
Mode of Faculty development programs	4.58	0.64	5.24	0.65	-28.7	<001	1.02

Table 6 shows that a paired sample t-test was conducted to compare of the whole faculty and junior faculty's perception about needs for faculty development programs. The values present, there was significant difference in the perception of the whole faculty and junior faculty.

Table 7

Comparison of the whole faculty and junior faculty based on students' responses

Needs for Faculty Development Programs	***Whole faculty***		***Junior faculty***		***Paired samples t-test***		***Effect size***
	M	***SD***	***M***	***SD***	**T**	**P**	**Cohen-d**
Expertise in Teaching Technology	5.30	1.05	3.47	0.66	41.2	<.001	2.09
Classroom Teaching Techniques	4.32	1.03	5.49	0.48	-26.4	<.001	1.46
Content Knowledge of Teacher	3.47	0.60	5.83	0.41	-89.2	<.001	4.59
Mode of Faculty development programs	4.58	0.66	5.26	0.66	-19.1	<.001	1.03

Table 7 shows that a paired sample t-test was conducted to compare of the whole faculty and junior faculty's perception about needs for faculty development programs based on students responses. The values present, there was a significant difference of the whole faculty and junior faculty based on students' responses.

Table 8

Comparison of the whole faculty and junior faculty based on Head of departments

Needs for Faculty Development Programs	***Whole faculty***		***Paired samples t-test***		***Effect size***
	M	***SD***	**T**	**P**	**Cohen- d**
Expertise in Teaching Technology	5.37	1.07	21.3	<.001	2.13
Classroom Teaching Techniques	4.33	1.04	-14.0	<.001	1.43
Content Knowledge of Teacher	3.46	0.59	-45.0	<.001	4.63
Mode of Faculty development programs	4.57	0.65	-9.0	<.001	1.00

Table 8 shows that a paired sample t-test was conducted to compare of the whole faculty and junior faculty's perception about needs for faculty development programs based on Head of the departments. The values show, there was a significant difference in the whole faculty and junior faculty based on Head of departments.

Table 9

Comparison of the whole faculty and junior faculty based on experience >5 years

Needs for Faculty Development Programs	***Whole faculty***		***Junior faculty***		***Paired samples t-test***		***Effect size***
	M	***SD***	***M***	***SD***	**t**	**P**	**Cohen-d**
Expertise in Teaching Technology	5.35	1.03	3.46	0.71	35.97	<.001	2.14
Classroom Teaching Techniques	4.34	1.07	5.51	0.46	-23.59	<.001	1.42
Content Knowledge of Teacher	3.47	0.58	5.82	0.42	-76.40	<.001	4.64
Mode of Faculty development programs	4.58	0.64	5.22	0.63	-16.64	<.001	1.01

Table 9 shows that a paired sample t-test was conducted to compare of the whole faculty and junior faculty's perception about needs for faculty development programs based on experience >5 years. The values show, there was a significant difference in the perception of based on experience.

Table 10
Comparison of the whole faculty and junior faculty based on student's perception (experience NA)

Needs for Faculty Development Programs	***Whole faculty***		***Junior faculty***		***Paired samples t-test***		***Effect size***
	M	***SD***	***M***	***SD***	**t**	**P**	**Cohen-d**
Expertise in Teaching Technology	5.30	1.05	3.47	0.66	41.22	<.001	2.09
Classroom Teaching Techniques	4.32	1.03	5.49	0.48	-26.37	<.001	1.46
Content Knowledge of Teacher	3.47	0.60	5.83	0.41	-89.25	<.001	4.59
Mode of Faculty development programs	4.58	0.66	5.26	0.66	-19.15	<.001	1.03

Table 10 shows that a paired sample t-test was conducted to compare of the whole faculty and junior faculty's perception about needs for faculty development programs based on no experience. The values show, there was a significant difference based on no experience.

Findings and Discussion

1-The responses of participants about their lack in expertise in Teaching Technology in whole faculty show that this component is overall weak, 18% faculty feel too much lack of expertise in computer use, 14% faculty feel too much lack in use of multimedia and 24% faculty feel too much lack in using software. Mean scores in all three skills are closely near to each other. The mean scores of using software is high as compare to others and mean score of using multimedia is less, this shows lack in use of multimedia

2-The responses of participants about their expertise in Teaching Technology in whole faculty show that this competence is overall better, 1 % faculty feels too much lack in the expertise of computer use, no faculty feels too much lack in use of multimedia and 1% faculty feels too much lack in using software. Mean scores in all three skills are closely near to each other. the mean scores of using software is high as compare to others and mean score of using multimedia is less, this shows less lack in use of multimedia

3-The responses of participants about their classroom Teaching Techniques in whole faculty shows that whole faculty feels deficiency in dealing with the questions in the classes. (M=5.19, SD=1.12). Whole faculty is much better in dealing big classes (M=3.39, SD=1.20)

4-The responses of participants about their classroom teaching techniques in Junior faculty reveals that junior faculty feels more lacking expertise in making the classes interactive, (M=6.29, SD=.79) while Junior faculty is good in controlling the class (M=3.74, SD=1.23). Other skills like teaching big classes (M=6.29, SD=0.79) are also lacking

5-The responses of participants about content knowledge of teachers in regard to whole faculty reveals that whole faculty feels less difficult to cite references to accentuate the learning process (M=3.10, SD=1.15). The whole faculty needed development programs after every year. (M=4.02, SD=1.21). Other aspects related to content knowledge, like latest knowledge is relatively better than as compare to other aspects (see table 4.6). While the responses of participants about their content knowledge of teacher in junior faculty shows that all participants are agreed on that junior faculty is lacking in the domain of their subject (M=6.18, SD=0.80). Junior faculty is lacking in the domain of latest knowledge (M=6.88, SD=0.34). But junior faculty is better in cite references to accentuate the learning process (M=3.76).

Conclusion

All types of analysis confirm that the whole faculty has more deficiency in expertise in usage of Technology in teaching and has less deficiency in classroom Teaching Techniques, content Knowledge, Mode of Faculty development programs, Skills for teaching training Programs. Junior faculty lacks more in content knowledge, classroom Teaching Techniques and Mode of Faculty development programs.

Recommendations

This study revealed a high level of need for faculty development so it is suggested that Higher Education commission should start such faculty development programs that can meet the required needs of respondent and it is also required to provide participants of faculty development program not only with best methods and finest instructional modes but also facilitate their connections inside the education settings. New teachers' professional development organizations should be established in collaboration with international institutes of teacher education. Finally, educators' platform should be

developed and operated organizationally, nationally and globally to provide opportunities to share the experiences and learn new practices while interacting other fellow professionals.

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