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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 in Punjab about the effectiveness of junior faculty development programs, being conducted in higher Educational 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 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. A 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 lack 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 improving 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: Junior Faculty Development Programs, Departmental Heads, Faculty Members, Students, Perceptions

Introduction

Teachers play a prime role in the survival, growth, and progress of any nation. Infect, they are the primary foundation of any country's educational pyramid. Nations, that have competent and responsible teachers gain sublimity and consolidation quite rapidly (Slavin, 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 the teacher has also changed along with pedagogical styles (Shah, et al, 2020).

However, Sethy (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 of their course material, and be ready to fulfill their ongoing commitment to the process of teaching and learning (Sciuchetti, & Yssel, 2019).

Dilshad et al., (2019) concluded that teachers can report changing 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 stresses that professional development programs for junior academic faculty play a pivotal role in developing scholarship, instructional excellence, and innovative organizational capacities (Orland-Barak, &

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Wang, 2020) and it functions as a driving force for developing academic vitality in educational institutions by focusing on the competencies required for teachers (Ajani, 2019).

Thus (Sengupta, 2019).), has explained that junior faculty development approaches became an indispensable plan and an 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, 2019).

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 et al., 2019). One of the former researchers, Memon (2007), narrated that junior faculty development activities were a wide range of professional and skill-oriented activities designed to enhance, renew and help faculty in their programs, teaching practices, administration, and research (Zepeda, 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, 2020).

Voogt, and Pieters, (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, et.al., 2020). Several 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 assigned role and enabling them best teachers by increasing their teaching competencies (Ventayen, 2019).

Similarly, Köse, and Korkmaz, (2019), explained that the focus of a comprehensive faculty development program is to develop the abilities and productivity of junior faculty, which would cause decreased stress, increased job satisfaction, and enhanced recruitment, retention, and entire success (Moya, et al., 2019). Moreover, Raza, et al. (2019) revealed the dominant perception that junior faculty development was the most beneficial and crucial track for the constant and forever success of faculty members.

The procedure of Faculty Development

Faculty development procedures and programs are 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). It can only be fruitful if these are initiated at the same time at both individual and institutional levels (Smith, et al., 2020).

Need for Faculty Development

A large number of studies that dealt with the 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, et al., 2019). Similarly, Draz, and Ahmad (2017), reported that departmental heads indicated a high to very high-level need for faculty development, and therefore to meet this level need junior faculty development approaches should be designed and implemented carefully to face the upcoming various threats (Ali, 2019).

Cushman (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, modes, and methods to improve their scholarship and expertise and they have to be acquainted with the latest communication skills and technologies (Leal Filho 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 a high-quality workforce for the development of the country (Donnelly, 2019). However, despite a very high degree of government interest in these quantitative achievements at the university level, the ground realities show serious qualitative deficiencies countering the realization of national expectations (Farrukh, et al., 2019).

The objective of the Study

To examine the need for junior faculty development at universities of Punjab as perceived by HoDs, faculty members, and students.

Research question

How to develop junior faculty at the universities of Punjab as perceived by HoDs, faculty members, and students through development programs?

Methodology

It was quantitative research that was conducted through a survey method.

Population

The population of the study was the total number of Universities in Punjab =55 (public -31 +private -24)

Sample

12 universities were selected based on equal volume for the 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, Eight hundred eight (51%) participants belonged to the public sector while 798(49%) participants belonged to the private sector. About 707 (44%) participants were students and 719(45%) were faculty members and 180(11%) participants were heads of departments in their field. Three hundred sixty-six (23%) participants had the experience of fewer than 5 years, 533(33%) participants had the 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

It was quantitative research that was conducted through a survey method. Data was collected by using a closed-ended five-point Likert scale questionnaire. 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 Teacher
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 of 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 based on 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 the 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

The values of the above table show the demographic information of the participants.

Table 2

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

Faculty lack in	Students		Teachers		HoDs			
	M	*SD*	*M*	*SD*	*M*	*SD*	*F*	*p*
Whole faculty's 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 a significant difference in students, teachers, and HoDs' perceptions about faculties' deficiencies.

Table 3

Comparison of participants based on different experiences regarding factors of faculty development

Faculty lack in	<5 years		>5year		No. exp.			
	M	***SD***	***M***	***SD***	***M***	***SD***	***F***	***p***
Whole faculty's 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 a significant difference in students, teachers, and HoDs' perception of faculties' deficiencies based on their experience.

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's 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 a significant difference in students, teachers, and HoDs' perceptions about faculties' deficiencies based on their gender

Table 5

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

Faculty lack in	**Junior**		**Senior**		**t-test**		
	M	**SD**	**M**	**SD**	**t**	**p**	**Cohen-d**
Whole faculty's 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 a significant difference in students, teachers, and HoDs' perception of faculties' deficiencies based on their rank; junior and senior.

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 the whole faculty and junior faculty's perception of needs for faculty development programs.

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 the whole faculty and junior faculty's perception of needs for faculty development programs 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 the whole faculty and junior faculty's perception of needs for faculty development programs based on the heads of the 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 the whole faculty and junior faculty's perception of needs for faculty development programs based on experience >5 years.

Table 10

Comparison of the whole faculty and junior faculty based on students' 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 the whole faculty and junior faculty's perception of needs for faculty development programs based on no experience.

Findings and Discussion

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

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

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

4- The responses of participants about their classroom teaching techniques in Junior faculty reveal that junior faculty feel more lacking expertise in making the classes interactive, (M=6.29, SD=.79) while Junior faculty is good at 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 the content knowledge of teachers regarding the whole faculty reveal that the whole faculty feel 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 the latest knowledge are relatively better than as compared to other aspects (see table 4.6). While the responses of participants about their content knowledge of teachers in junior faculty show that all participants agreed that junior faculty is lacking in the domain of their subject (M=6.18, SD=0.80). Junior faculty are lacking in the domain of the latest knowledge (M=6.88, SD=0.34). But junior faculty is better in cite references to accentuate the learning process (M=3.76,

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, and Skills for teaching training Programs. Junior faculty lacks more in content knowledge, classroom Teaching Techniques, and Mode of Faculty development programs.

Conclusion

It was concluded that junior faculty members have a deficiency in expertise in instruction methodology but seniors were strong in their expertise. These were the view of the students. Juniors were significantly more skilled in multimedia and computer usage. It was revealed by the respondents that classroom teaching techniques in the whole faculty show that the whole faculty feels deficient in dealing with the questions in the classes. (M=5.19, SD=1.12). The whole faculty is much better at dealing with big classes (M=3.39, SD=1.20)

4- The responses of participants about their classroom teaching techniques in Junior faculty reveal that junior faculty feel more lacking expertise in making the classes interactive, (M=6.29, SD=.79) while Junior faculty is good at 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 the content knowledge of teachers regarding the whole faculty reveal that the whole faculty feel 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 the latest knowledge are relatively better than as compared to other aspects (see table 4.6). While the responses of participants about their content knowledge of teachers in junior faculty show that all participants agreed that junior faculty is lacking in the domain of their subject (M=6.18, SD=0.80). Junior faculty are lacking in the domain of the latest knowledge (M=6.88, SD=0.34). But junior faculty is better in cite references to accentuate the learning process (M=3.76,

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, and 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 the Higher Education Commission should start such faculty development programs that can meet the required needs of respondents and it is also required to provide participants of faculty development programs 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' platforms should be developed and operated organizationally, nationally, and globally to provide opportunities to share experiences and learn new practices while interacting with other fellow professionals.

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