

# **Diverse Faculty Members' Satisfaction with Virtual Professional Development during the Covid-19 Pandemic**

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## **Abstract**

The study aimed to assess the level of satisfaction and perceptions of the diverse faculty members regarding virtual PDs during the COVID-19 pandemic. The focus of this study was to identify the level of satisfaction with three variables in mind: outcomes and content, trainers, and logistics. The participants are lecturers, assistant professors, associate professors, and full professors from 20 colleges at a significant Saudi university. Six hundred faculty members participated in this study. The study utilized a quantitative technique and an online questionnaire to gather essential data. The data was examined and tested for validity and reliability using SPSS software. Analyses such as the mean, standard deviation, and ANOVA tests explored the data. The study found no significant differences between males and females regarding content, trainers, and logistics. However, F-value was substantial for females in academic rankings related to the content, trainers, and logistics. Moreover, the virtual PDs events were generally well-received by all attendees, regardless of their academic rank or gender. This is the first study investigating faculty members' perception of virtual PDs events during the corona pandemic. This study is expected to assist university administrators, educators, and program developers in developing more practical educational plans in the event of a crisis. The study concluded with suggestions for program leaders and administrators and recommendations for further studies in this area.

**Keywords:** Professional Development, Satisfaction, Faculty Perceptions, Distance Learning, COVID-19 Pandemic

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## **Introduction**

Since the beginning of the Covid-19 pandemic, it has affected every aspect of human life, including economics, politics, social issues, public health, and educational systems. More than one billion students worldwide were affected by the Covid-19 epidemic, which forced the closure of thousands of schools. UN data shows that more than 190 countries shut down their educational institutions to curb the spread of the virus and lessen its impact (Alqoot, 2021).

A pandemic's impact on higher education is one of several areas where governments are scrambling to intervene and lessen the severity of its ramifications. Universities in Saudi Arabia have closed their doors, halted all traditional learning services, and now rely on digital learning and remote work methods to educate their students. They take advantage of the digital systems supplied by the 4IR and apply the most appropriate learning systems. Their work runs smoothly throughout the many academic and administrative levels following the technological communication and work systems.

As the COVID-19 pandemic spread in early 2020, colleges, universities, and K-12 institutions worldwide were compelled to hastily switch from face-to-face classes to what is known as "emergency remote teaching" (ERT; Bozkurt & Sharma, 2020). This pandemic significantly impacted education and learning systems in various countries, necessitating government action. Governments implemented digital educational platforms to overcome the high costs of traditional education and distribute electronic content to all citizens. One of the most effective ways to teach these days is through an educational platform (Yanhong, 2018; Ramadan, 2020; Ng et al., 2013).

According to a virtual meeting conducted by the National Center for E-Learning at the beginning of the crisis, Saudi universities "succeeded" in dealing with the task of completely transitioning to E-Learning during the COVID 19 crisis with the participation of various university deans. Distance education in Saudi universities finished the educational journey of both male and female students during the pandemic. For more than a year now, Dr. Hamad bin Muhammad Al-Sheikh, the Minister of Education, has been instructing Saudi universities to revise their emergency plans, increase their precautions, and find appropriate educational alternatives.

Doctoral students and freshly recruited faculty in higher education have been criticized for their lack of preparedness (Alkathiri, 2019). In today's job market, it's critical to keep one's professional abilities up to date with the latest advancements in today's job market. To accomplish this, they were designed to help experts. " It's been a turbulent few years for faculty development centers. Academic research has been transferred to institutional design and program assessment. A failure to meet public expectations and support the long-term existence of centers is due to this. On the other hand, the evaluation procedure indicates the amount of training required in a particular area. The training needs assessment also helps identify resources, select appropriate training approaches and technologies, and evaluate the activity to gauge its effectiveness (Aguinis & Kraiger, 2009; Blanchard & Thacker, 2004).

### **Statement of the problem**

The Saudi higher education institutions have traditionally focused on faculty professional development and career advancement for teaching excellence as an integral component of their overall reform plan. As a general rule, faculty members are well-versed in their subject matter but not in the methodologies of teaching their subjects (Austin, 2002; Austin & McDaniels, 2006; Brew, Boud & Namgung, 2011; Healey, 2000). Higher education groups and the general public have questioned faculty members' teaching abilities and readiness as institutions have

come under increased scrutiny (Altbach, 2011). This study aimed to gauge faculty members' perceptions of distance professional development events during the COVID-19 pandemic.

### **Objectives of the study**

Many studies have examined the perceptions of university faculty who taught online courses during the Covid-19 pandemic; however, other studies have examined students' perceptions of E-learning. This study is being carried out to fill up a knowledge gap. The study, which we believe to be the first of its kind, looked at virtual PDs events from various Saudi higher education academic disciplines. The study examines faculty members' perceptions and experiences of virtual professional development training events concerning outcomes and content, trainers, support, and logistics during the COVID -19 pandemic. Further, it seeks to determine what topics they would be more likely to learn. It also looks to understand how important the participants believe professional development can enhance their pedagogy. This research ultimately will help training centers create better professional development programs that could entice faculty to attend. If they participate in well-conceived programs that meet their needs, this may improve classroom teaching overall. Future planning for PDs programs could benefit from the outcomes of this study. The overarching research question for this study is: What is the faculty members' satisfaction with virtual professional development during the Covid-19 Pandemic. This research study aimed to answer the following questions:

1. Is there a correlation between the satisfaction of faculty members with PDs and their gender during the COVID 19 epidemic in terms of outcomes, trainers, and logistics?
2. Does faculty satisfaction with PDs and their ranks during the COVID 19 pandemic link with outcomes, trainers, and logistics?

### **Literature review**

Professional development programs can improve faculty members' perceptions and teaching abilities (Chang, Lin & Song, 2011; Coffey & Gibbs, 2000). (Chang, Lin & Song, 2011; Coffey & Gibbs, 2000). One case for improving the significance of teaching in higher education has been made by revisiting how administrators and faculty members talk about it (Kucsera & Svinicki, 2010; Chism et al., 2002; Sorcinelli & Davis, 1996).

Some education professionals argue that professors should be forced to participate in professional development opportunities (Chism & Szabo, 1998; Coffey & Gibbs, 2000; Kucsera & Svinicki, 2010). (Chism & Szabo, 1998; Coffey & Gibbs, 2000; Kucsera & Svinicki, 2010). Many academics are hostile to the idea, stating that it undermines the traditional culture of academia or diverts time away from their core job of performing original research (Buchanan, 2011; Akerlind, 2011). Despite the significant dispute, several studies have determined that university instruction is bad. Higher accountability demands (Altbach, 2011; Schuster & Finkelstein, 2007) necessitate that schools improve the quality of their teaching staff.

According to Muammar and Alkathiri's (2021) study on faculty satisfaction with teaching professional development programs, seven factors accounted for 72% of satisfaction and had the most significant impact on positive ratings. When evaluating a program's suitability, it looked at its ability to achieve goals, the appropriateness of its topics, activities, and academic developers' teaching abilities.

Several studies have found that faculty development programs and services should be examined from a new perspective (Chalmers & Gardiner, 2015; Kolomitro & Anstey, 2017; Kreber & Brook, 2001; Spowart et al., 2017). Due to the usage of "inadequate or instrumental evaluation procedures" in educational advancement, scholars such as Bamber and Stefani (2016) recommend that "impact" should be rethought as "evidence value" (p. 242). (p. 242). The study's findings reveal that faculty development programs and services are commonly appraised based on participant satisfaction and assessments. There is a large quantity of proof (Kolomitro & Anstey; Spowart et al., 2017). (Kolomitro & Anstey, 2017; Spowart et al., 2017). Although satisfaction statistics only provide a regional and flawed degree of possible influence on faculty development, we feel that such data may exist to improve programs, resulting in increased professional development experiences for academics.

Higher education institutions have a vested interest in ensuring that their faculty members are satisfied with their professional development. According to Pifer and his colleagues (2015), successful faculty development may enhance and improve students' experiences and outcomes at the institution (2015). Successful professional development programs can also boost the quality of teaching and learning at a school. Furthermore, it can improve the school's broader impact on higher education and society in various ways.

Developing one's professional abilities and expertise is crucial to advancing one's career. Professional development encompasses formal assignments, conferences, and on-the-job training. Educators' claimed and actual educational practices contradict their teaching ideas (Desimone, 1997; Ebert et al., 2011; Murray & Macdonald, 1997). Due to a scarcity of data, it isn't easy to establish definite conclusions on the benefits of professional progress.

Dysvik and Kuvaas (2008) argue that "trainee evaluations, or learner value assessments, are the fundamental manner through which organizations evaluate training programs" (p. 139). Staff satisfaction surveys are regularly done with past staff training and development. It is standard practice to have participants rate their experience with an exercise. "However, even though they are routinely evaluated in practice, trainee reactions are still poorly understood" (Dysvik & Kuvaas, 2008, p. 139). More research is needed to uncover the essential aspects impacting contentment. More outstanding education faculty professional development has been examined to understand what features contribute to better satisfaction for effective faculty development programs. These qualities must be discovered to prioritize the most critical tasks and activities.

Many aspects of the virtual context have been discovered through research to increase professional development opportunities. At least four advantages have been shown in the literature, including improved technology efficiency, expanded campus and community networking, and enhanced support for reflective learning over traditional classroom settings (Ertmer, 2005; Mackey, 2008; Tuzlukova et al., 2013).

A variety of virtual environment features has been found to enhance professional growth. There are at least four advantages to using technology, campus and community networking, and encouraging reflective learning in a generally excellent way to classroom contexts (Ertmer, 2005; Mackey, 2008; Tuzlukova et al., 2013).

There are various online training alternatives available. However, there are few instances of how online educators see training to gain these abilities (Bigatel et al., 2012; Grabowski et al., 2016). (Bigatel et al., 2012; Grabowski et al., 2016). Researchers cannot quantify the influence of

professional development on teaching and learning in the absence of this research (Meyer 2014). According to studies, instructors may not use all available professional development chances on an equitable basis. According to Pagliari et al. (2009), teachers are not always available to participate in online training. Faculty may choose not to participate in events for various reasons, including a lack of pedagogical tools and resources for encouraging active learning and student involvement inside the virtual classroom (Bolliger & Wasilik, 2009; Wingo et al., 2017). Kang (2012) interviewed professors in an online program who felt the same way about professional development training, which they deemed "useless" as it was unrelated to their teaching needs but "useful" since it gave technical information. Inadequate instructor preparation will hinder their ability to educate and support students enrolled in distant learning programs (Grabowski et al., 2016).

## **Methodology**

### **Research Design**

This study used a quantitative research design to answer the research questions. The study aimed to determine if there were substantial disparities in faculty perceptions of virtual professional development during the COVID-19 pandemic.

The staff professional development center in the Eastern Province of Saudi Arabia surveyed faculty members who attended professional development events. Before data collection, the questionnaire was pretested among several professors enrolled in academic and professional development programs. The first section of the survey includes the demographic variables of gender, years of teaching experience, and educational levels. The second part of the survey inquired about participants' satisfaction with the COVID 19 pandemic's training events. The Kirkpatrick Model-level one is a widely accepted method for evaluating training and learning programs. The participants were instructed to complete an electronic monkey survey. Respondents were sent an email with an electronic copy of the study. Participants were invited to participate in the study, detailed in full in the questionnaire. The respondents' personal information was kept confidential. They were instructed to complete the survey only once, and their participation was entirely voluntary. The data gathered for this inquiry was analyzed using SPSS version 21.0. (SPSS Inc, ILL, USA, 2003). Descriptive statistics were applied to interpret the data better.

This study aimed to examine the level of satisfaction of various faculty members with virtual professional development during the Covid-19 Pandemic in terms of outcomes and content, trainers, support, and logistics. Three essential topics were covered in the data collection: curriculum creation, instructional methods, and assessment. In addition to lectures and mini-workshops, participants participated in forums and hands-on exercises. Each session lasted an average of 2.5 hours. Small workshops were held as part of a specific program, and small workshops were held (less than one day). Other programs took longer to complete and required more time and effort (up to four days).

## Study Sample

The total number of participants was 600, among which 446 were female and 154 male faculty members, comprising 26% and 74%, respectively. The training events were held at a significant Saudi university in the Eastern Province. The study included Saudi and non-Saudi academic members from 20 colleges. The fact that there are more women than men in the faculty reflects female domination—21% lecturers, 52% assistant professors, 20% associate professors, and 7% professors. Table 1 displays the demographics of the study participants.

Table 1: study participant' demographics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	M	154	25.7	25.7	25.7
	F	446	74.3	74.3	100.0
	Total	600	100.0	100.0	
Valid	Lecturer	128	21.3	21.3	21.3
	Assistant Prof	313	52.2	52.2	73.5
	Associate Prof	119	19.8	19.8	93.3
	Full Prof	40	6.7	6.7	100.0
	Total	600	100.0	100.0	

Table 1 shows a total of 600 respondents have completed the questionnaire. Distant professional development events had an overall satisfaction score of 93%. The satisfaction rate was slightly higher in faculties that had previously engaged before the Covid-19 pandemic (82%), which controverts the common belief that face-to-face training is more effective than virtual training. Assistant professors comprised 52.2 % of the respondents (n=313). More than two-thirds of respondents (n=128) were lecturers, and almost one-third (n=119) were associate professors. However, just 6.7 % (n=40) of the responders were full professors.

## Instrumentation and Data Collections

The staff professional development center conducted a faculty event assessment summary, which prepared a 22-item questionnaire. The necessary measures have been taken to ensure the validity and reliability of the results. Content validity and face validity were considered when creating the questionnaire (De Vos & Fouché, 1998:82) - measured what it was designed to measure and had enough information about the subject matter at hand (Leedy, 1989). The Cronbach's Alpha for three items was (.690). The questionnaire's content validity was ensured by conducting an exhaustive literature review and requesting experts review each item's phrasing and field assignments. Participating faculty members received an email invitation to complete an online survey following each session between (August 2021 and November 30, 2021), to reflect on their experiences after attending professional development teaching and learning events. Participants were asked for their opinions on the event and suggestions to improve the programs in the survey (Kirkpatrick, 2016). The Likert scale questions used a six-point scale of 1 = strongly disagree, 2 = disagree, 3 =slightly disagree, 4 = slightly agree, 5= agree, 6= strongly agree

## Results

Table (2) faculty members' satisfaction overall with professional development events over a one semester

<b>Overall Evaluation</b>	<b>Mean</b>
Overall Satisfaction with the event	9.35
Would recommend it to a colleague	9.28
Overall Evaluation of event	9.32
<b>Overall Evaluation</b>	<b>(8.2 in 2020) 9.32/10</b>

Table (2) depicted an overall rating of 9.35/10, suggesting that most academics had a positive experience with virtual PD events. Pre-Corona Pandemic training events achieved a rating of 8.2 out of 10. It illustrates that virtual training events proved effective compared to face-to-face training events.

To answer the first question: "Is there a correlation between the satisfaction of faculty members with PDs and their gender during the COVID 19 epidemic in terms of outcomes, trainers, and logistics?" The researcher calculated the mean and standard deviation of the level of satisfaction with the events concerning the content, trainer, and logistics based on gender. Table 3 displays the result.

Table-3: Mean and Standard Deviation ANOVA for the level of satisfaction based on gender

<b>Items</b>	<b>Male N=154</b>		<b>Female N=446</b>		<b>P-value</b>
	<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>	
<b>level of satisfaction with the content</b>	5.526	0.70	5.489	.69	0.577
<b>satisfaction with the trainer</b>	5.668	.53	5.639	.62	0.605
<b>satisfaction with logistics differ</b>	5.270	.91	5.141	.94	0.144

Table (3) shows the gender-based mean and standard deviations of faculty members' satisfaction with distance PD events.

The study shows no significant differences between males and females regarding content, trainers, and logistics. For example, males have a mean of 5.52 and a standard deviation of 0.70 regarding content, whilst females have a mean of 5.48 and a standard deviation of 0.69. Males mean 5.27 and a standard deviation of 0.91 in logistics, whereas females have a mean of 5.14 and a standard deviation of 0.94.

To answer the second question: " Does faculty satisfaction with PDs and their ranks during the COVID 19 pandemic have any link with outcomes, trainers, and logistics?"

Table 4: Mean and Standard Deviation ANOVA for the level of satisfaction based on ranks

Items	Lecturer N=128		Assistant Prof N=313		Associate Prof N=119		Full Prof N=40		P-value
	M	SD	M	SD	M	SD	M	SD	
	level of satisfaction with the outcomes and content	5.48	.68	5.46	.71	5.62	.57	5.41	
satisfaction with the trainer	5.66	.51	5.60	.03	5.76	.48	5.51	.60	0.04
satisfaction with logistics	5.22	.92	5.08	.93	5.39	.92	5.05	.97	0.01

Males' mean and standard deviation indicates a positive experience with no statistically significant difference. However, both sexes actively participated in the discussion because they found the content interesting.

Table 5: ANOVA Results for the level of satisfaction based on Ranks

ANOVA for the level of satisfaction with the outcomes and content					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.594	3	.865	1.778	.150
Within Groups	289.795	596	.486		There is no statistically significant difference
Total	292.388	599			

ANOVA for satisfaction with the trainer differ

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.040	3	1.013	2.785	.040
Within Groups	216.901	596	.364		statistically significant difference
Total	219.942	599			

ANOVA for satisfaction with logistics differ

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.836	3	2.945	3.367	.018
					statistically significant

<b>Within Groups</b>	521.309	596	.875
<b>Total</b>	530.145	599	

The researcher used an ANOVA analysis to determine the validity of the differences and results depicted in Table 5. As seen in Table (5), the study shows significant differences between males and females in academic ranks corresponding with females in content, trainers, and logistics. The degree of satisfaction with professional development progress is almost the same for both genders. Professional development is crucial for both men and women. There was gender disparity in professional outcomes and content, trainers, and logistical preparations. Outcomes had average differences of 0.150, with statistically significant differences in satisfaction owing to gender at (0.05).  $F = (0.865)$  was the level of statistical significance. Trainers have average difference of .040  $f = (1.013)$ , and logistics of .018  $f = (2.945)$ . There was a statistically significant logistical difference, but this is expected given the novelty of delivering professional development over the internet. However, faculty members' ranks and logistics are significant because of the participation discrepancy among females. There is a gender difference in faculty members' ratings of events outcomes and content usefulness and application.

## **DISCUSSION AND CONCLUSION**

Faculty members were generally pleased with their virtual PD experiences, with an average rating of 9.35 out of 10. Professional development activities held in 2020 before the Corona Pandemic received an overall evaluation grade of 8.2. However, a new survey shows that the general experience of distance professional growth can be improved. The events were well-received by all participants. According to an analysis of variance and F-value, there were no statistically significant differences in the outcomes, trainers, and logistics of virtual PDS events between genders. On the other hand, the F-value is essential for the three variables relating to ranks by females. Findings from the current study are in accordance with results from other studies conducted in different countries (Adnan, 2018; Ag-Ahmad, 2020; Tuzlukova, 2017). Although Muammar and Alkathiri's study "What really matters to faculty members attending professional development programs in higher education" reveals that logistical and supporting facilities are minor significant factors for faculty members' satisfaction, this does not mean that these factors are of no importance. It is imperative that the center for staff professional development come up with other options, such as bridging the academic gap. Virtual learning is a new and fast-growing tool for faculty members and professional development facilitators. Assuming there is another COVID-19 outbreak, this could be the best way to keep professionals prepared.

### **Recommendations**

This study makes some recommendations for academic developers, educators, and others in higher education who want to ensure faculty satisfaction with professional development programs and optimize the positive impact of these initiatives. The participants suggested decision-makers and higher administration recommendations to develop new themes that address future events enhancement. Some proposed changes include: (a) adopting more explicit event

guidelines; (b) coping with students from varied ethnic backgrounds and academic difficulties (c) using techniques in the digital age for delivering lectures and making them more interactive. (d) employing artificial intelligence in education and training. (e) utilizing remote assessment methods used by students in practice. (f) implementing university teaching approaches to promote students' creativity and social responsibility through emotional intelligence. (g) managing virtual rooms in remote learning environments

### **Implications for Future Practice and Research Recommendations**

Many aspects of our society have been transformed by technological advancements, including how we work and communicate. Online communities for teacher learning have received support in professional development literature (Duncan-Howell 2010; Lock 2006).

The staff professional development center should encourage educators to take a more active role in critical debates and expand the curriculum beyond traditional ideas. Using modern technologies, various knowledge sources, and collaborative methods will help them have the best face-to-face engagement. Other scholars interested in the same field of study are likely to collaborate on further research on this issue. Adult education ideas and practices will benefit from investigating virtual PDs, particularly in educational training and practice variety. By identifying more inclusive areas and effectively exploiting diversity, this study can help establish a welcome teaching and learning environment for a culturally and educationally diverse teaching community. Finally, educators aren't the only ones who have a responsibility to keep up with their professional development. Institutions must provide support and training to help faculty integrate new forms of professional development into their curricula.

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