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Factors Affecting Academics Professional Development of Higher Education Institutions

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Abstract: Several challenging contributions linked to the standard of teaching in higher education institutions and one of them is academic professional development programs. The challenge is so obvious due to structural changes in a modern society that requires an improvement to the teaching quality. Hence, this paper presents a study on determine the factors affecting academics professional development in UAE higher learning institution. There are 63 factors that were clustered into seven groups of factors namely design teaching plan; communication skills; expertise skill in the lesson content; individual and occupational; policy and strategy; technological factors; and teaching skills. The collected data from the questionnaire survey was analysed to determine the ranking of the seven groups' factors it was found that *communication skills* group of factors is the most influencing factor affecting academics professional development. The following factor is the *design of teaching plan* factors ranked as second and *policy and strategy* factors ranked as third place. The collected data was also analysed using cross tabulation approach and found that for professor concerned is communication skills and the least concerned is individual and occupational identity. While for associate professor, the concerned factor is the expertise skill in the lesson content and the least concerned is communication skills. For senior lecture, the most concerned is design of teaching plan and the least concerned is technology. Finally for lecturer, the most concerned is design of teaching plan and the least concerned is individual and occupational identity. The findings from this study will benefit related parties in formulating their professional development programs for the academics.

Keywords: Academics professional development, higher education institutions

1. Introduction

Higher education is the catalyst of the economic and social growth of a society, and it has undergone various transformation at the latter end of the 20th and the beginning of the 21st century (Aufi and Ali, 2014; Ma et al., 2016). Among the factors that lead to the changes in the emphasis of higher education include the changing emphasis of knowledge economy, development of new technology and digitalization and the proliferation of knowledge and life-long learning. According to Wilms and Zell (2003) and Khan (2018), the upward cost, unpredictable wages, the explosive increase in student demand, quality issues and an explosion of new technology have driven higher education of institutions to face a steep learning curve. Such specific problems must therefore be considered and attempts must be made to address the anticipated needs of the individuals and communities (Ilie et al., 2017). In an effort to expand their

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educational facilities, HEIs are under heavy pressure to adapt to accelerating changes in modern society. The evolving essence of university study and teaching/learning technologies emphasises the need for better quality of education (Norton, 2018). HEIs have recently been pushed to use quality methods to take advantage of the developments in education and optimise educational and learning processes (O'Sullivan, 2016). Reimers and Chung (2019) highlighted that quality education is one of the fundamental necessities for providing the nation with the information, skills and competences to resolve the challenges emerging from globalisation (ICT). Consistent to the changing emphasis on knowledge society driven by the development of digitalization and new technologies, universities and colleges around the world have embraced new approaches to quality management (QA) and Total Quality Administration (TQM) in order to sustain and boost quality education (Aufi and Ali, 2014).

One of the important elements in improving the quality of academicians in the higher education institutions is through professional development (PD) programs. Professional development refers to continuing education and career training after a person has entered the workforce in order to help them develop new skills, stay up-to-date on current trends, and advance their career. Increased attention has been given to promoting the professional development (PD) of academics in introducing new methods in the field of teaching quality (Biggs, 2011). In other words, enhanced HE training includes PD from teaching professionals. Kent (2004) emphasises that teachers should keep up to date with best practise and overall development in programme quality in order to develop professionally. Bryan and Clegg (2019) also consider that PD programs provide academics with appropriate and up-to-date skills to help them function efficiently. Thus, HEIs are able to increase the quality of teaching by concentrating on and linking academic PD to improve teaching quality. These institutions are also responsible for enhancing the quality of faculty positions, in particular teaching practises, along with government emphasis on human resources development (HRD). Enhancing the standard of education requires adequate academic advancement in order to learn new and developed knowledge (Kvasnicka et al., 2017). The consequences of enhancing teaching quality (for the related academic PD) should be made a priority in HEIs in order to promote and improve academic knowledge and skills. These implications were defined and connected to the proposed Teaching quality factors (TQFs) model as a prevalent approach to address the PD barriers of academics and to identify factions for improving teaching quality and the associated PD.

Since 1997, the UAE has its expanded higher education system internationally, attracting many well-regarded foreign universities to its 'free zones'. This investment is part of the UAE's commitment to compete globally as a knowledge-based society (Emirates Competitiveness Council, 2014). In 2017, the UAE's Ministry of Education (MOE) launched its National Strategy for Higher Education 2030, prioritising quality higher education, particularly with respect to research and the country's focus on becoming a knowledge economy. The 2030 plan is focused on developing students, linking academia and the labour market, engaging the private sector in curricular development, promoting and expanding the production of research and increasing the global competitiveness of its higher education institutions by creating new and innovative academic programmes. This expansion is specifically aimed at producing specialized and professional graduates who can compete in vital global sectors by producing research, engaging in entrepreneurship and joining the labour market. Currently, PD is important to upgrade academics' awareness and practise to sustain and improve the quality of education. The government's Human Resource Development (HRD) policies have funded the PD of academics in the UAE Higher education (Waxin and Bateman, 2016). Therefore, the UAE government will save money and spare time to provide all the support it needs to create, retain and train our staff in all aspects, particularly HEIs (Gallagher, 2019). The UAE administration also offers educational opportunities to allow academics to obtain useful knowledge and experience and essential technical skills on the labour market as needed in the various fields of sustainable development (Ashour, 2017). That is why UAE institution for higher education (HEI), including academics should consider investing resources and efforts for improving their competencies. The HEI should play an important role in enhancing and expanding its human capital based on the fund supported by the government. In order to increase the standard of education in tertiary education, considerable attention should be paid to develop academics. Zanqar et al. (2019), stresses the need for academics to upgrade and enhance their skills through professional development in the face of fast evolving, expectations for high standards and demands for higher quality.

2. Factors affecting Academics Professional Development

Design teaching plan factors that have an influence on the design of learning activities. To adequately identify and select these factors, the pertinence, feasibility, flexibility and value they contribute to teaching must be assessed. With this, a conversational model of learning can be adopted, considering adequate strategies according to the objectives, bearing in mind the environment and the supporting technologies, configuring in this way a typology of resources for learning.

Teachers play an important role in enabling effective teaching-learning processes. Teachers need to manage effective teaching-learning processes so that students know how to learn and utilize their knowledge appropriately in everyday life. Teachers' ability to conform to the standard demands of the tasks poses a positive effect on the outcomes, such as changes in academic outcomes, the attitudes of learners, the skills of learners, and the increasingly changing work patterns of teachers. To that end, the teaching ability of the teacher becomes very important and must be mastered

by the teachers in carrying out their duties and functions. Without good teaching skills it is highly unlikely that teachers will be able to innovate or create material from the curriculum, which in turn can provide a sense of boredom for both teachers and learners to perform their respective tasks and functions.

Communication skills can be defined as the transmission of Communication skills can be defined as the transmission of a message that involves the shared understanding between the contexts in which the communication takes place. In addition, teacher communication skills are important for a teacher in delivery of education to students. Communication skills involve listening and speaking as well as reading and writing. For effective teaching a teacher needs to be highly skilled in all these areas. Teacher with good communication always make the things easier and understandable (Freddie Silver). Effective communication skills are really important for a teacher in transmitting of education, classroom management and interaction with students in the class. Teacher has to teach the students having different thinking approaches. To teach in accordance with the ability and capability of the students a teacher needs to adopt such skills of communication which motivate the students toward their learning process. Good communication skills of teacher are the basic need of academics' success of students, and professional success of life. Teacher communicates more instructions orally in classroom to students. Teacher with poor communication skills may cause failure of students to learn and promote their academics. Student need to understand that what is right, and what is wrong while it totally depends upon the communication skills of teachers which he adopts in class-room. Good communications minimize the potential of unkind feeling during the process of teaching. For learning the learner must be attentive toward their teacher during the lecture.

Even with adequate technology access, effective professional development remains a reason that makes it difficult to increase the level of technology integration in classrooms. Little is understood about what these experiences might look like for teachers ''on the ground,'' during implementation of technology-integrated professional development (Wilkerson, Andrews, Shaban, Laina, & Gravel, 2016). Research indicates that simply providing teachers with professional development opportunities related to using technology does not translate into higher levels of integration in the classroom. It is only when they are provided the knowledge, skills, resources, and support that they will integrate technology in the curriculum to maximize its effects on teaching and learning (Papanastasiou, Zemblyas, & Vrasidas, 2003). However, schools are providing technology-related professional development. Technology integration was the second most common topic for professional development (67% of teachers) only following training on a content specific area (Rotermund, De Roche, & Ottem, 2017). But, of those that participated in training, 59% only received 8 or fewer hours indicating teachers are left on their own with the daunting task of choosing the most appropriate technology tool to support teaching and learning.

Individualized instruction is a method of instruction in which there is one-to-one teaching and self-paced learning based on an outline of progressive goals leading to the course/curriculum objectives. Courses appropriate for individualized instruction are usually those that require skill building. From the above issue, we can summarize the factor for successful policy implementation as the following: Effective planning, good plan and design of the policy from policy it self's; policy objectives are clear and consistent; transparent institutional framework and approval at highest level; public and private partnership consultations with all stakeholders; consistency and continuity in policy; setting realistic targets and milestone supported by resources; give importance to strong economic fundamentals; strong implementation and monitoring mechanism; effective public service delivery political stability (Jack R; 2007, Sylvia L, 2013; Donaldson G; 2015). Hence, the factors affecting academic professional development can be clustered into seven groups as in figure 1 below.

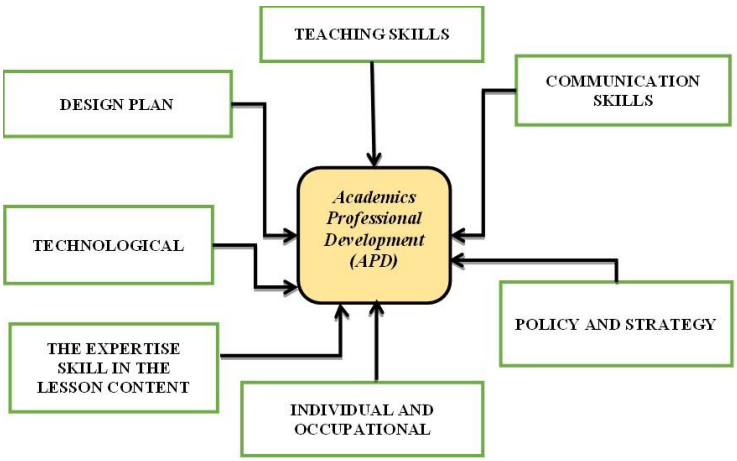

Fig. 1 - seven groups of factors affecting academic professional development

3. Methodology

This study adopted a quantitative approach research where the data was collected through structured questionnaire survey and the collected data from the survey was analysed using statistic means. The questionnaire was designed based on 63 factors affecting the quality of the academic professional development of UAE higher education institutions. The factors that were clustered into seven groups of factors namely *design teaching plan; communication skills; expertise skill in the lesson content; individual and occupational; policy and strategy; technological factors; and teaching skills*. Respondents amongst the academicians from three higher learning institutions in UAE were requested to gauge using 5-points Likert scale of each factor in influencing/affecting the academic professional development programs.

The respondents were from the first three public university in UAE including teaching staff of (higher colleges of technology; United Arab Emirates University and Zayed University). The population of HEI is approximately 2600 as reported in the Ministry of Labour's website. The selection of respondents was based on random sampling technique and the sample size was determined using Krecjie & Morgan (1970) table as shown in Table 1. By considering the target population is 2600, the appropriate sample size for this research is 335.

Table 1 - Krecjie & Morgan sampling size determination

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	373
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	225	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	67	270	159	750	256	2600	335	100000	384
Note: "N" is population size's" is the minimum sample size									

4. Results and Analysis

A total of 350 questionnaires were distributed to the respondents from the selected universities using simple random approach. However, 283 valid responses were collected from the questionnaire survey. This represents 80.9% response rate which is considered good representation of the populations. Even though the valid responses are less than the minimum sample size, however Goh and Hooper, 2009 stated that greater than 100 valid samples are viewed as a realistic size and exceeding 200 is labelled as a large sample. The collected data was analysed and the results are as follow.

4.1 Demography

Respondents involved in the survey are engaged in different faculties in United Arab Emirates University. These included as summarized in Table 4.3. The platform upon which respondents were chosen in this study strictly adhered to the sampling procedure discussed earlier. In simple random sampling design being one of the probability sampling methods where a sample is selected by chance not by personal judgement of the researcher (Awang, 2012) was adopted in this study to ensure objective and unbiased sampling of the respondents. The demography of the sample depicts the size and distribution in terms of gender, age, nationality, level of study, current of study, and faculties as illustrated in Table 2 below.

Table 2 - Demography background of the respondents

	Items	Frequency	Percentage
Title	Professor	4	1.41
	Associate Professor	23	8.12
	Senior lecturer	97	34.27
	Lecturer	159	56.18
	Total	283	100
Experience	1 to 5 years	86	30.38
	6 to10 years	95	33.56
	11 to 15 years	79	27.91
	More than 16 years	23	8.12
	Total	283	100
Current position	Senior Management Member	3	1.06
	Faculty Dean	7	2.47
	Deputy Dean of research	5	1.76
	lecturer Staff	268	94.69
	Total	283	100

About 56.18% of the respondents are lecturers and 34.27% are senior lecturers. The Professors positions were recorded 1.41% and associate professors were represented 8.12 % from the total targeted respondents. The distribution according to experience shows that the majority of respondents who have experience from 1 to 5 years represents 30.38% and 33.56% for those who have experience from 6 to 10 years. For the respondents who have experience from 11 to 15 years and above 16 years were recorded 27.91% and 8.12% respectively. The questionnaires were distributed according to one of the probability sampling techniques that is the systematic random sampling reflecting the professional development of academics at UAE higher education institutions. Table 2 shows that the majority of respondents (94.69 %) are lectures staff. 2.47% of respondent represents are faculties deans while 1.76% of respondent represents the Deputy Dean of research, while others representing 1.06% of total respondents are Senior management members.

4.2 Reliability of the Collected Data

Reliability is an assessment of the degree of consistency between multiple measurements of a variable. Reliability extent to which a variable or set of variables is consistent in what it is intended to measure. The reliability coefficient assesses the consistency of the entire scale, with Cronbach's alpha. This study used the criteria of Cronbach's alpha for establishing the internal consistency reliability: Excellent ($\alpha>0.9$), Good ($0.7< \alpha <0.9$), Acceptable ($0.6< \alpha <0.7$), Poor ($0.5< \alpha <0.6$), Unacceptable ($\alpha <0.5$) (George and Mallery, 2019; Kline, 2011; Bhatnagar et al., 2014). Cronbach's Coefficient Alpha is the method used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and + 1.0 and the higher values reflect a higher degree of internal consistency. The Cronbach 's coefficient alpha was calculated for each field of the questionnaire as elucidated in Table 3 which show the values of Cronbach's Alpha for each construct.

Table 3 - Result of reliability test

Group of factors	No. of factors	Cronbach's Alpha
Design of teaching plan	11	0.908
Teaching skills	11	0.867
Communication skills	9	0.872
Technological	9	0.747
The expertise skill in the lesson content	8	0.808
Individual and occupational identity	8	0.898
Policy and strategy	7	0.849

Table 3 shows the value of alpha calculated for each group as well as overall data. The values of alpha are greater than 0.7, while the alpha value is 0.778 for overall data. This range is considered high as previous studies show that if Cronbach's α is more than 0.7 it indicates that inner consistency of data is in high level and it can be highly acceptable

(Kline, 2011; Bhatnagar et al., 2014; George and Mallery, 2019). Since, the alpha value for each group as well as overall data estimated for this study is found higher than 0.7, which indicates that the questionnaire data are valid and reliable.

4.3 Normality of the Collected Data

Normality refers to the form of the data distribution for an individual metric variable according to Hair et al. (2011) and its correspondence to the normal distribution (which is the benchmark for statistical methods). The tests for normality are skewness and kurtosis. While the skewness value provides an indicator of the distribution symmetry, the kurtosis provides data on the distribution's 'peakness' (Pallant, 2011). The theory of normality can be used in the study for skewness and kurtosis values in the range of'-1 to +1 'or'-1.5 to +15' (Schumacker and Lomax, 2004). It is worth noting that things having non-normal skills or kurtosis was lowered in this study predictor. This is in line with Tabachnick et al. (2007) and Pallant's recommendations (2011).

Table 4 - Result of normality test

Group	Item Description	Skewness	Kurtosis
Design of teaching plan	1. Determine the lesson before teaching	-1.016	1.073
	2. Specify the learning objectives, the topics to be covered, assessment and the references at the beginning of the term.	-.792	.758
	3. Use suitable teaching and lesson material	-.608	.153
	4. Arrange the sequence of the lesson from easy to difficult	-.778	.918
	5. Inform the summary of the lesson materials at the end of class	-1.027	1.348
	6. Use different methods of assessment	-.854	1.039
	7. Use appropriate method of assessment	-.601	.276
	8. Connect previous lesson with the current lesson	-.756	.760
	9. Make sure the lesson contents are appropriate according to the heads and homework	-.592	.308
	10. Provide a summary of the lesson plan at the end of the lesson	-.742	.303
	11. Construct homework relevant to the lesson covered	-.874	.695
Teaching skills	1. Teach different education levels	-.431	-.235
	2. Use various teaching methods to ensure effective delivery of the subject taught	-.542	.040
	3. Use suitable teaching method for effective learning	-.295	-.043
	4. Engage students in the learning process	-.783	1.249
	5. Identify students' learning difficulties and find ways to improve students' learning	-.694	.389
	6. Use suitable approach to motivate students to learn	-.763	1.109
	7. Practice the principles of learning psychology in class	-.709	.620
	8. Encourage students to participate actively in class activities	-.563	-.035
	9. Effectively use the lesson plan designed in the instruction program	-.629	-.122
	10. Control the discipline of the students in class	-.852	.753
	11. Monitor students' performance	-.674	-.134
Communication skills	1. Effectively communicate verbally and in written with the learners	-.824	.748
	2. Give clear respond to learners' inquiries and questions	-.642	.770
	3. Provide learners with easy access to the professor out of the class	-.801	.871
	4. Motivate the student to study and acquire new knowledge	-.725	.749
	5. Provide sufficient learning opportunities for learners	-1.189	1.509
	6. Have good listening and questioning skills	-.816	1.032
	7. Guide the students in their learning activities	-.514	-.252
	8. Detect learning difficulties among their students	-.747	.316
	9. Create conducive learning environment	-.563	-.035
Technological	1. Use the technology with ease	-.078	-.525
	2. Use the technology for effective teaching and learning	-.624	.315
	3. Use reliable technology	-.697	.356
	4. Use technology that facilitate learning and communication in	-.880	1.024

Group	Item Description	Skewness	Kurtosis
	the teaching and learning process		
	5. Use up-to-date technology in the teaching and learning process	-.850	.510
	6. Use variety of technology in the teaching and learning process	-.482	-.197
	7. Continuously updating their knowledge and competency of the latest technology for teaching and learning	-.717	.158
	8. Use the suitable technology that facilitate student's learning	-.455	-.213
	9. Have a strong belief that the use of technology can improve the quality of teaching	-.439	-.409
The expertise skill in the Lesson content	1. Update the content subject relevant to the latest development of the body of knowledge	-.752	.431
	2. Relate the content subject to educational community needs	-.638	.566
	3. Enrich students' knowledge contents from the scientific dimension	-.526	.252
	4. Demonstrate to the students the theoretical and practical aspect of the content subject	-.237	-.127
	5. Help students to understand the content subject by relating to the real world	-.352	-.265
	6. Demonstrate that teachers have rich knowledge in the content subject	-.559	.017
	7. Continuously update their knowledge in the content subject through readings, research and writing	-.465	-.078
	8. Be recognized as the source of reference or expert for the content knowledge	-.632	.456
Individual and occupational identity	1. Demonstrate their scientific domination in the content subject	-.838	1.623
	2. Adopt innovative and new teaching practices	-.949	1.474
	3. Adopt students centered learning approach	-.797	.920
	4. Adopt appropriate arrangement for teaching the subjects	-.622	.587
	5. Adopt and relate the social and ethical norms to the content subject	-.844	1.100
	6. Facilitate the development of cognitive skills related to content subject among students through students' participation	-.851	1.363
	7. Facilitate the development of affective outcomes and behavioural outcomes among students through lecture talk	-.431	-.661
	8. Have high commitment in producing students with relevant knowledge and skills for the 21st century	-.684	-.067
Policy and strategy	1. The quality policy of the organization needs to be imposed to all teachers and not just at the senior level of the organization	-.702	.050
	2. The planning for quality is very important	-.978	.826
	3. The institutions must have good systems for continuous improvements	-.713	-.036
	4. Quality awareness is effectively implemented among staff and students	-.920	.899
	5. The institutions encourage learning and innovation at all levels.	-.687	.253
	6. Data about satisfaction and models is collected regularly	-.352	-.265
	7. Good system for continual quality improvement (CQI)	-.687	.253

The threshold for measurement items according to Pallant (2011) and Kline (2011) is that the skew and kurtosis value scores for measurement items should be between -2 to + 2 and the results for all items within the acceptable range of -2 to + 2. Results from table 4 show that the collected data is within the normality range.

4.4 Mean Score of the Collected Data

The mean value for each of the factors was calculated and generated using SPSS software and the results are as in table 5.

Table 5 - Result of factors' mean score

Group	Item Description	Mean score
Design of teaching plan	1. Determine the lesson before teaching	3.64
	2. Specify the learning objectives, the topics to be covered, assessment and the references at the beginning of the term.	3.60
	3. Use suitable teaching and lesson material	3.56
	4. Arrange the sequence of the lesson from easy to difficult	3.66
	5. Inform the summary of the lesson materials at the end of class	3.72
	6. Use different methods of assessment	3.85
	7. Use appropriate method of assessment	3.66
	8. Connect previous lesson with the current lesson	3.68
	9. Make sure the lesson contents are appropriate according to the heads and homework	3.56
	10. Provide a summary of the lesson plan at the end of the lesson	3.79
	11. Construct homework relevant to the lesson covered	3.91
Teaching skills	1. Teach different education levels	3.37
	2. Use various teaching methods to ensure effective delivery of the subject taught	3.58
	3. Use suitable teaching method for effective learning	3.14
	4. Engage students in the learning process	3.52
	5. Identify students' learning difficulties and find ways to improve students' learning	3.66
	6. Use suitable approach to motivate students to learn	3.90
	7. Practice the principles of learning psychology in class	3.77
	8. Encourage students to participate actively in class activities	3.50
	9. Effectively use the lesson plan designed in the instruction program	3.46
	10. Control the discipline of the students in class	3.87
	11. Monitor students' performance	3.55
Communication skills	1. Effectively communicate verbally and in written with the learners	3.67
	2. Give clear respond to learners' inquiries and questions	3.69
	3. Provide learners with easy access to the professor out of the class	3.76
	4. Motivate the student to study and acquire new knowledge	3.77
	5. Provide sufficient learning opportunities for learners	4.05
	6. Have good listening and questioning skills	3.84
	7. Guide the students in their learning activities	3.40
	8. Detect learning difficulties among their students	3.63
	9. Create conducive learning environment	4.14
Technological	1. Use the technology with ease	3.02
	2. Use the technology for effective teaching and learning	3.49
	3. Use reliable technology	3.58
	4. Use technology that facilitate learning and communication in the teaching and learning process	3.67
	5. Use up-to-date technology in the teaching and learning process	3.70
	6. Use variety of technology in the teaching and learning process	3.44
	7. Continuously updating their knowledge and competency of the latest technology for teaching and learning	3.57
	8. Use the suitable technology that facilitate student's learning	3.43
	9. Have a strong belief that the use of technology can improve the quality of teaching	3.44
The expertise skill in the Lesson content	1. Update the content subject relevant to the latest development of the body of knowledge	3.54
	2. Relate the content subject to educational community needs	3.38
	3. Enrich students' knowledge contents from the scientific dimension	3.28
	4. Demonstrate to the students the theoretical and practical aspect of the content subject	3.80
	5. Help students to understand the content subject by relating to the real world	3.76
	6. Demonstrate that teachers have rich knowledge in the content subject	3.84
	7. Continuously update their knowledge in the content subject through readings, research and writing	3.78
	8. Be recognized as the source of reference or expert for the content knowledge	3.24

Group	Item Description	Mean score
Individual and occupational identity	1. Demonstrate their scientific domination in the content subject	3.67
	2. Adopt innovative and new teaching practices	3.56
	3. Adopt students centered learning approach	3.51
	4. Adopt appropriate arrangement for teaching the subjects	3.57
	5. Adopt and relate the social and ethical norms to the content subject	3.62
	6. Facilitate the development of cognitive skills related to content subject among students through students' participation	3.64
	7. Facilitate the development of affective outcomes and behavioural outcomes among students through lecture talk	3.63
	8. Have high commitment in producing students with relevant knowledge and skills for the 21st century	3.56
Policy and strategy	1. The quality policy of the organization needs to be imposed to all teachers and not just at the senior level of the organization	3.56
	2. The planning for quality is very important	3.77
	3. The institutions must have good systems for continuous improvements	3.60
	4. Quality awareness is effectively implemented among staff and students	3.70
	5. The institutions encourage learning and innovation at all levels.	3.54
	6. Data about satisfaction and models is collected regularly	3.76
	7. Good system for continual quality improvement (CQI)	3.54

Based on table 5, the minimum mean score for the 63 factors is 3.02 which is Use the technology with ease in the Technological group. While, the maximum mean score is 4.14 which is Create conducive learning environment in the communication skills group.

4.5 Ranking of the Factors

The mean score attained by each factor in each group was averaged to give the averaged mean score for each group as in the table 6.

Table 6 - Ranking of the factors

Group of factors	No. of factors	Averaged mean score	Rank
Design of teaching plan	11	**3.694**	**2**
Teaching skills	11	**3.575**	**6**
Communication skills	9	**3.772**	**1**
Technological	9	**3.482**	**7**
The expertise skill in the lesson content	8	**3.578**	**5**
Individual and occupational identity	8	**3.595**	**4**
Policy and strategy	7	**3.639**	**3**

Table 6 indicates that Communication skills factors is the most influencing factor affecting academics professional development. The following factor is the Design of teaching plan factors ranked as second and Policy and strategy factors ranked as third place.

4.6 Cross Tabulation Analysis

Cross tabulation analysis is to analyse the categorical data where it allows to draw precise, impactful insights from the collected data sets (Csiszár, Gokhale & Kullback, 1980; Wermuth & Lauritzen, 1983).. One of the important items in the demography is the status of the academician which comprises of professor, associate professor, senior lecture, and lecturer; thus, this status is cross tabulated with the factors affecting academic professional development as in figure 2

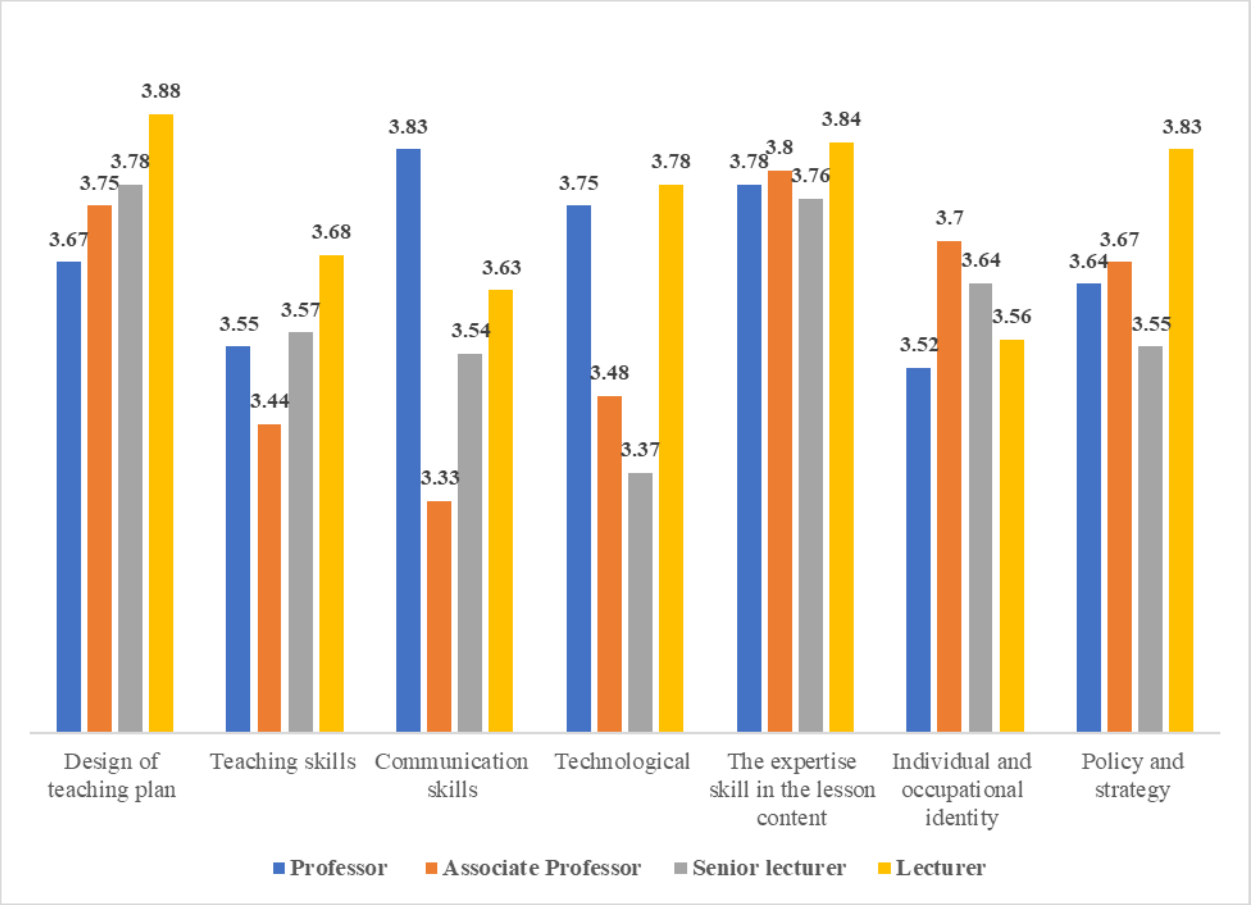

Fig. 2 - Cross tabulation chart factors and the academic staffs

Figure 2 shows that for professor concerned is communication skills and the least concerned is individual and occupational identity. While for associate professor, the concerned factor is the expertise skill in the lesson content and the least concerned is communication skills. For senior lecture, the most concerned is design of teaching plan and the least concerned is technology. Finally for lecturer, the most concerned is design of teaching plan and the least concerned is individual and occupational identity.

5. Conclusion

This paper has presented a study on determine the factors affecting academics professional development in UAE higher learning institution. There are 63 factors that were clustered into seven groups of factors namely design teaching plan; communication skills; expertise skill in the lesson content; individual and occupational; policy and strategy; technological factors; and teaching skills. The collected data from the questionnaire survey was analysed to determine the ranking of the seven groups' factors it was found that *communication skills* group of factors is the most influencing factor affecting academics professional development. The following factor is the *design of teaching plan* factors ranked as second and *policy and strategy* factors ranked as third place. The collected data was also analysed using cross tabulation approach and found that for professor concerned is communication skills and the least concerned is individual and occupational identity. While for associate professor, the concerned factor is the expertise skill in the lesson content and the least concerned is communication skills. For senior lecture, the most concerned is design of teaching plan and the least concerned is technology. Finally for lecturer, the most concerned is design of teaching plan and the least concerned is individual and occupational identity. The findings from this study will benefit related parties in formulating their professional development programs for the academics.

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