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Correlation between Lecturers' Professional Development Activities and their Competencies in Maldives Higher Education Institutes

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Abstract. The quality of higher education (HE) is one of the key areas the higher education system of the Maldives focuses on to develop and expand the sector. Two of the factors that contribute to and influence the quality of HE are professional development (PD) and lecturers' competency. However, in the context of Maldives, although efforts are made in the area of PD, little to no research has been conducted in this area. Hence, the purpose of this study is to examine the relationship between lecturer PD activities and their competencies in Maldives' higher education institutes. A quantitative research design was adopted, which conducted a cross-sectional survey by administering a structured online questionnaire. A total of 171 lecturers participated, which included both full-time and part-time lecturers from two public and two private institutions. Data analysis revealed that there is a weak positive correlation between PD activities and lecturers' competency; $r_s(129)=0.232$, $p=0.008$. It is also possible that PD activities conducted do not cater for the needs of lecturers, and a culture where structured and individual PD activities are supported and encouraged is not efficiently established. In light of these findings, it is important to strengthen and expand the existing PD policies and focus on providing effective PD sessions on topics and areas that are most needed for lecturers, rather than on generic topics. This study contributes to the empirical literature on PD in the context of Maldives and to the overall development of the HE sector.

Keywords: professional development activities; higher education; lecturers' competency

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1. Introduction

According to the Maldives higher education (HE) master plan 2016–2021, the HE system of the Maldives seeks to expand and develop the sector, focusing on five main areas, one of them being the quality of HE (Department of Higher Education, 2015). Among several factors which contribute to the quality of HE are professional development (PD) activities. Webster-Wright (2009) argued about the way PD is conceptualized in contemporary research. She reframed PD, focusing on aspects such as "learning rather than developing" and "holism rather than atomism", which means that PD should be viewed with a larger lens that may include any form of activities adopted by lecturers to become better educators (Çelïk & Dïkïlitaç, 2015). One of the other factors which has been found to determine the quality of education is the competency of educators (Suryati, Arfin, & Yarnest, 2020), which is perceived to be enhanced by PD activities (Apriliyanti, 2020). In simple terms, competence is the skills required to do a job effectively. In the field of education or HE, the concept of competence becomes more complex. Imron et al. (2019) defined "competency as rational behavior in order to achieve the required goals in accordance with the expected conditions" (p. 94).

According to Maldives Higher Education Institutions (HEIs), PD activities conducted at the institutes include training, workshops, courses, seminars, conducting research, and taking academic programs (Islamic Univeristy of Maldives (IUM), 2016; Maldives National University (MNU), 2020; Villa College, 2017). Some of the training and courses are from universities overseas. Moreover, in 2017, two public universities in the country signed a memorandum of understanding for five years, with one of the objectives being to share expertise, collaboration, and organization of PD activities such as training, workshops or seminars (MNU, 2017). Nonetheless, inadequate PD programs were identified as one of the weaknesses found during a strengths, weaknesses, opportunities and threats analysis done at IUM in 2015 (IUM, 2016). Another problem is that most lecturers resist integrating new technologies; thus, a positive attitude toward Information and Communication Technology (ICT) will help uptake ICT in PD activities (Kinaanath, 2013). However, owing to the Covid-19 pandemic, PD training in ICT is expected to increase. In spite of these efforts, no empirical literature has been published in the context of Maldives which indicates the PD activities lecturers take part in or their relationships to lecturers' competency.

In the context of the Maldives, making strategic plans and affiliating with other institutions for better PD, and conducting PD activities in specific competency aspects, are efforts made in recent years. Hence, it will take time to see significant impacts of PD activities on the different aspects of lecturers' competency. The main focus of the HE sector of the Maldives has been the provision of quality HE for the increasing number of students, with the best available resources. This indicates that the HE sector of the Maldives is still in the early stages of development. The purpose of this study, then, is to examine the correlation between lecturers' PD activities and their competencies at Maldives HEIs. Based on such purpose, the following hypothesis is tested:

H_o: There is no significant correlation between PD activities and competency of lecturers at HEIs of the Maldives.

2. Literature Review

Spencer and Spencer (1993) presented a general approach for the design of competency learning or teaching experiences which includes six steps. This approach was based on four theories: (1) adult experiential education theory, (2) McClelland's theory of motive acquisition, (3) social learning theory, and (4) self-directed change theory.

Adult Experiential Education Theory.

"Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 2015, p. 49). David Kolb published his experiential learning theory in 1984 and explained two reasons why the approach is called "experiential". The first reason was that his theory stemmed from the intellectual works of John Dewy, Kurt Lewin and Jean Piaget, and the second reason was to highlight the significant role experience plays in the learning process. According to Kolb (2015), this theory is widely used in adult learning, using the experiential learning cycle (Figure 1). There are four modes of grasping experience: Abstract Conceptualization (AC): composing a new idea or set of instructions; Active Experimentation (AE): planning how to use the composed idea or instructions and trying it out; Concrete Experience (CE): feedback on the behavior of the experiment; and Reflective Observation (RO): reflecting on the experience to modify the idea or instruction for future use. This theory is most effective in adult learning when all four modes are employed (Spencer & Spencer, 1993).

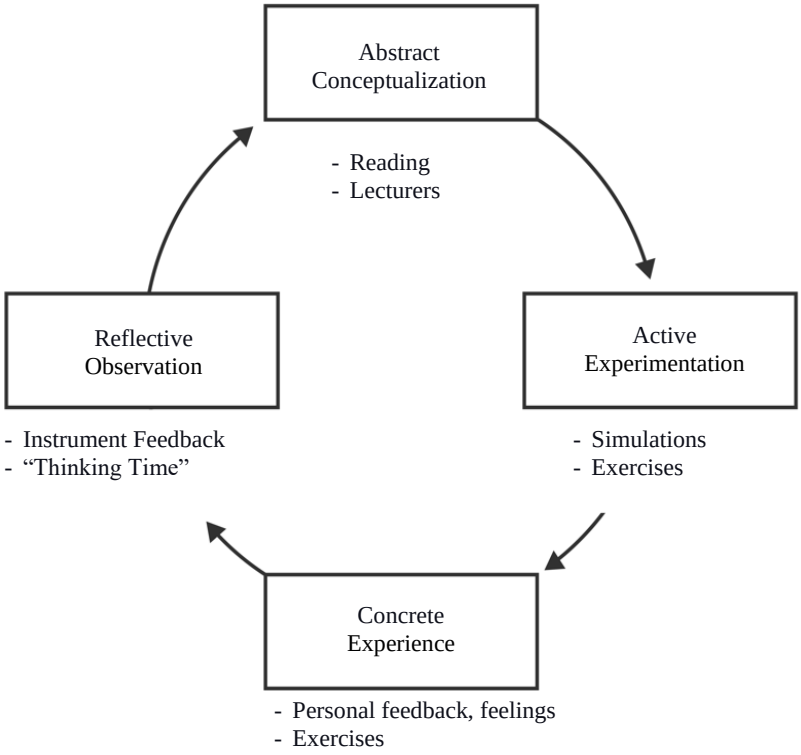

Figure 1: Adult Learning Styles
Source: Competence at Work: Models for Superior Performance (1993)

McClelland's Theory of Motive Acquisition

McClelland's theory of motive acquisition published in 1965 identified 12 propositions which people can use to acquire or change individual traits such as motives. He describes motives as "affectively toned associative networks" (McClelland, 1965, p. 322) within an individual. Spencer and Spencer (1993) summarized the propositions to five inputs. First, the conceptual framework given to the learner to think about their behavior and promote achievement-motivated thoughts with desirable outcomes. Second, the learner must receive feedback on their current competence and the potential competencies they could acquire to reach success goals. Third, the practice referring to the training experience of the learner, which is later used in real experiences. Fourth, the learner must set solid goals and use competency in important activities, because, once the goals are set, and feedback is received, it will increase the possibilities of achieving the goal through newly formed motivation. The fifth and last input is that learners must practice thoughts and behaviors in a socially safe and supportive environment because what is learned through training is better maintained in a membership which shares a common language and values.

Social Learning Theory

A vast portion of what humans learn in day-to-day life is from observation. Social learning theory is a learning process in which interpersonal skills are learned by observing or imitating effective behaviors of role models in a given situation (Spencer & Spencer, 1993). Observing demonstrations, videotapes, and tutorials to learn a particular competence and to apply or imitate in real situations are some

of the behavior-modelling methods. For example, in the context of HE, a lecturer may learn a new method of student assessment from his/her mentor by observing the mentor teaching.

Self-Directed Change Theory

Over the late 20th century, researchers such as Kolb, Winter, Berlew, and Boyatzis contributed in presenting models of self-directed change. Spencer and Spencer (1993) explain that, according to self-directed research, for an adult to change behavior, three conditions must be present: dissatisfaction with the existing competency (Actual); clarity about the desired competency (Ideal); and clarity about how to go from Actual to Ideal. As learners, they must feel a discrepancy between their current and desired competencies, so that this discrepancy creates a drive for change. Subsequently, this theory came to be known as Intentional Change Theory (ICT). Boyatzis (2006) explained it as a complex system where "ICT describes essential components and [the] process of desirable, sustainable change in one's behavior, thoughts, feelings, and perceptions" (pp. 608–609).

Based on these four theories, Spencer and Spencer (1993) proposed six steps to learn competencies. These six steps are described below with their objectives, providing examples from the context of HE.

1. Recognition: Letting the learner recognize and convince him/herself that competencies are crucial to the profession, and need to be taught. For instance, a lecturer compares and contrasts a novice and an expert teacher and recognizes the competencies the novice lecturer lacks that the expert lecturer has, thereby reflecting on his/her own competence level.

2. Understanding: In this step, competency is taught to the learner, either through reading or listening to a lecture, through subject-specific training, or through videos and tutorial demonstrations. In HEIs, lecturers attend professional development training on topics such as leadership or pedagogy; lecturers learn the knowledge they lack through online e-learning platforms or watching video tutorials; lecturers take further education to get more in-depth knowledge in their disciplines.

3. Self-assessment: Giving feedback to learners on their current competency against potential advance competency levels. To self-assess, lecturers give feedback to one another on their newly learned practices, skills, and performances in training.

4. Skills practice/feedback: Practicing the newly learned competence in a realistic simulation and get coaching feedback to improve their performance. Lecturers practicing how to use a new technology that was integrated into teaching and getting feedback is an example of this step.

5. Job application goal setting: In this step, the learner sets goals and comes up with a plan to use their competency to achieve that goal in their work. Studies have found that goal setting has a positive impact on employee effectiveness (Teo & Low, 2016), and HE teachers saw it as an approach for growth (Camp, 2017). For example, a lecturer sets a goal to research a certain number of effective practices to facilitate class discussions.

6. Follow-up support: Learner engages in support activities such as sharing competency goal achievement plans with supervisors to get feedback, sharing progress, tips, and ideas with other learners by conducting learner group meetings where they can encourage one another. This step could be done by lecturers having meetings to discuss their experience of applying new competencies, discussing what has worked and not worked for them, and supporting one another in improving competency.

A holistic glance at the four theories and six steps proposed by Spenser and Spenser (1993) suggests that there is a diverse array of methods and activities one can adopt to learn new skills, knowledge and traits. When applied in the setting of HE, these methods relate to the PD activities set for lecturers by HEIs, and individually, to enhance their competencies.

Theoretical Framework

The theoretical framework is the structure which supports the theory of the study and guides the study, based on one or more related concepts or theories. Given that the primary focus of this study is the PD activities in HEIs of the Maldives and how these correlate to lecturers' competency, a topology of accredited and non-accredited PD activities and a competency framework for quality assurance for HEIs are used as a theoretical foundation. The topology of PD activities (Table 1) is published by the National Forum for the Enhancement of Teaching and Learning in Higher Education (2016) in Ireland, which is the national organization that leads and takes responsibility for enhancing the teaching and learning quality of Irish HE. The spectrum of PD activities is based on the findings of a consultation process, and there is general agreement that the activities could be considered under the umbrella of PD. Additionally, this topology of PD activities is suitable to use in the context of the Maldives HE because some of the activities are already in use in the Maldives education sector. According to Shafiya (2015), there are two types of professional learning among teacher educators in the Maldives: PD activities formally designed by the educational institutions, and informal PD activities among colleagues. As shown in Table 1, PD programs are divided into two categories: accredited and non-accredited. The non-accredited includes three types, which are collaborative, structured, and unstructured PD activities.

Table 1: Topology of Accredited and Non-accredited PD Activities

Non-Accredited			
1. Collaborative (Non-formal)	**2. Unstructured (Non-formal)**	**3. Structured (Informal)**	**4. Accredited (Formal)**
Learning from these activities comes from their collaborative nature.	Activities are independently led by the individual. Engagement is driven by individual's needs/interests. Individuals source the materials themselves.	Externally organized activities (by an institution, network, disciplinary membership body). They are typically facilitated and have identified learning objectives.	Accredited programs of study.

Examples			
Conversations with colleagues, sharing research at a conference, peer review of teaching.	Reading articles, following social media, watching video tutorials, keeping a reflective teaching journal/ portfolio, preparing an article for publication.	Workshops, seminars, training.	Professional certificates, graduate diplomas, Masters, PhD in: teaching and learning; eLearning; leadership in education; education policy, etc.

Source: Conceptual model for the professional development of those who teach in Irish HE: report on the findings of the consultation process (2016)

Collaborative PD refers to learning and developing skills in groups, which could be discussions with colleagues, sharing information, peer reviewing and giving feedback; several studies have shown that collaborative PD activities are effective. Poekert's (2012) study shows that school reform efforts on collaborative PD and instructional feedback could improve teacher practice. Another study which reviewed 18 articles on team-based PD identified that it helps to gain new pedagogical knowledge, to reflect critically on teaching practices, and to improve the student-teacher relationship (Gast, Schildkamp & van der Veen, 2017).

Unstructured PD activities are the efforts imposed on individuals independently, based on their needs and interest in the field. This includes reading articles and watching videos to improve skills, following works of distinguished people through social media, reflecting on teaching experiences, or conducting studies for publication. In contrast, structured PD activities are activities organized by HEIs or another agency, such as workshops, seminars, subject-specific training with identified learning objectives. There are numerous options and alternatives an academic can choose from the continuous PD activities, and these may present opportunities for career development, show commitment to the profession, enhance personal growth, and overcome shortcomings (Wall, 2013).

The second category of PD activities is the accredited activities, which refers to accredited study programs such as a diploma, degree, Master's or PhD in fields related to HE. The ENQA's quality assurance professional competency framework produced by their staff development group was published in 2016. In the framework, three core competencies are formed, namely: knowledge, systemic/technical, and interpersonal, where each of these competencies is detailed to specifics (Table 2). As these core competencies underpin the creation of a basis for recruitment, job design and staff development activities (European Association for Quality Assurance in Higher Education, 2016), this competency framework is suitable as a theoretical foundation for this study.

Table 2: Competency Framework

Core Competencies		
Knowledge	**Systemic/Technical**	**Interpersonal**
- Higher education sector knowledge. - Concept of the national system for quality assurance and enhancement, and of the internal quality practices of institutions.	- Organizational and planning skills. - Management of own workload and ability to work effectively with other teams/ colleagues. - Information technology and data skills. - Problem solving/ analytical skills and continuous learning.	- Political sensitivity. - Communication (oral and written), teamwork and flexibility. - Autonomy and resilience. - Commitment and responsibility.

Source: ENQA quality assurance professional competency framework (2016)

Each of the three core competencies has attributes of essential knowledge and professional and personal skills of academic staff. The first core competency, knowledge, entails knowledge of the national HE system, operational understanding of HEIs, concepts for quality assurance and improvement of the HE system and practices of the institution. The second core competency, systemic/technical, features diverse skills such as organization, planning, managing workload, working in teams, information technology, data and security, critical thinking, problem-solving and continuous learning. The last core competency, interpersonal, includes skills in regard to the phrase "underlying characteristics". Boyatzis (1982) defines job competency as "an underlying characteristic of a person in that it may be a motive, trait, skill, aspects of one's self-image or social role, or a body of knowledge he or she uses" (Boyatzis, 1982, p. 21). This core competency includes skills such as professional attitude in the work environment, excellent oral and written communication, awareness of political sensitivity, working with teams and respecting others' opinions, taking responsibility, commitment to work, being open to criticism and giving constructive feedback, and managing stress and challenges.

Conceptual Framework

A conceptual framework serves as a synthesis of theoretical framework and literature to explain the hypotheses the researcher intends to investigate. It offers a logical structure that helps to provide readers with a picture or visual display of how ideas and variables are connected in a study (Grant & Osanloo, 2014). In a quantitative research perspective, a conceptual framework depicts the relationships between the main ideas and concepts of a study. Furthermore, Tamene (2016) described such a framework as a "network/interlinked system, or relationship of assumptions, expectations, beliefs" (Tamene, 2016, p. 51). Figure 2 depicts the conceptual framework of this study and describes the hypothesized relationship among variables, defined from the theoretical framework and literature reviewed.

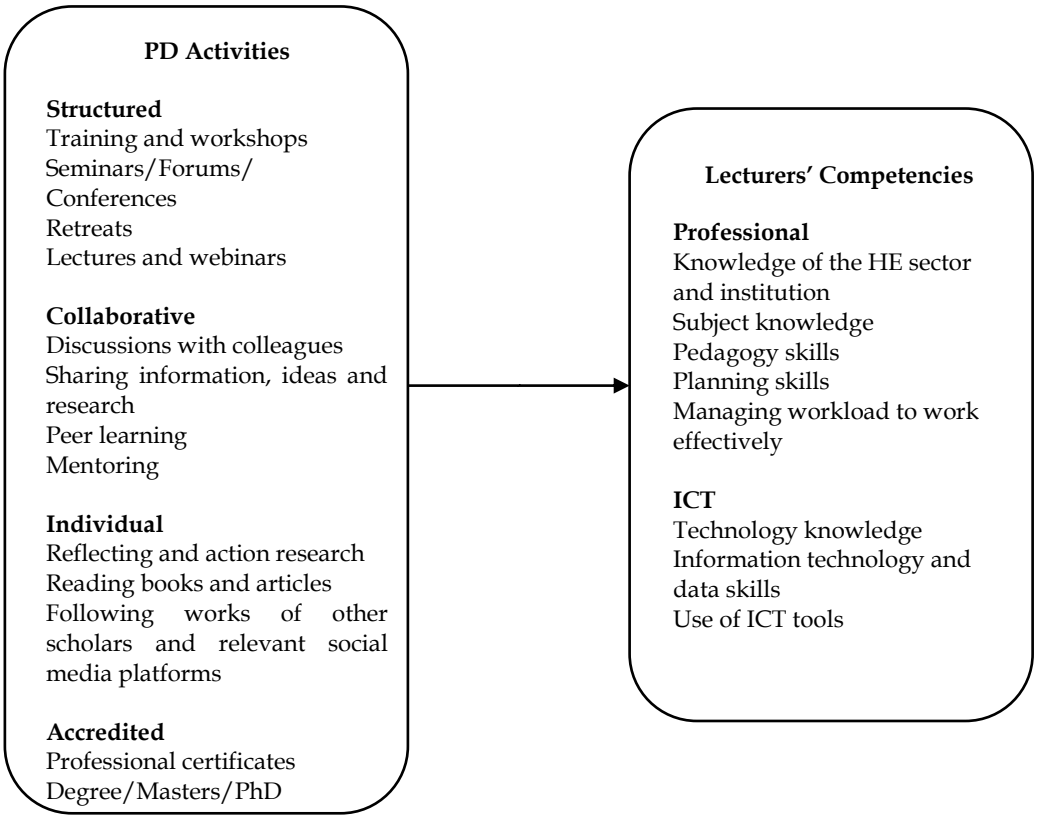

Figure 2: Conceptual Framework of the Study

The conceptual framework of this study (Figure 2) shows the relationship between the independent variable, PD activities, and the dependent variable, competency of lecturers working at the HEIs of the Maldives. The PD activities are divided into four dimensions: structured, collaborative, individual, and accredited. The four dimensions are based on the topology of accredited and non-accredited PD activities (Table 2) in the theoretical framework of this study and on the categories of PD activities identified from the literature.

The competency of lecturers is constructed under two core competencies: professional, and ICT competencies. The two core competencies are based on the ENQA's competency framework (Table 2) presented in the theoretical framework of this study.

With the variables and dimensions explained, the conceptual framework in Figure 2 will aid in guiding this study, corresponding to the research objectives and questions.

Relationship between Professional Development Activities and Lecturer Competency.

Echols, Neely and Dusick (2018) conducted a study to investigate the different types of competency-based education (CBE) training provided by university faculties for CBE component development, and to determine how CBE training

influences the perceived level of competence in five areas: content development, assessment development, technical, skills, collaboration, and communication skills. The results indicated one-on-one training, webinars, phone conferences, and self-study were significantly related to the level of competence, whereas face-to-face and online courses were not. Moreover, Echols et al. (2018) found that the amount of time spent on training affects the level of competency as well. They concluded that much work still needs to be done in determining faculty training needs. Hence recommendations were made to assess the knowledge and needs after taking part in training as this will help in designing future PD activities and completing a pre-training survey to assist in designing more fitting delivery modes of training, including knowledge (Echols et al., 2018).

Another study which agrees with the above correlation is that of Yuan et al. (2017) on environmental education teachers from 25 colleges and universities in central and southern Taiwan. Data were collected from 224 valid questionnaires received from 250 distributed. One of the hypotheses tested in the study was the correlation between PD, and professional knowledge and competence; the results revealed a "positive and remarkable" correlation between them (Yuan et al., 2017, p. 3171). They further mentioned that the professional knowledge and competence of environmental education teachers could be improved by encouraging them to have more hands-on environmental experiences and opportunities for further study. Correspondingly the study by Putri et al. (2019) focusing on finding the correlation between PD training and English teachers' competence in the Pidie Regency of Indonesia found a strong relation between training and teacher competence. They also suggest participating in other forms of PD activities, such as group study, seminars, and conferences (Putri et al., 2019). In yet another study into the ICT competency of new HE teachers of Shanghai, China, after a module of ICT PD, findings showed a strong to moderate correlation between the variables of technology, pedagogy and content knowledge (TPACK) and those of ICT acceptance, except between technological knowledge and usefulness of ICT (Wu, et al., 2015). This study also states that findings indicate that the PD module of ICT should provide more current technology knowledge and ICT skills.

3. Methodology

A quantitative research method was adopted as this study is quantitative in nature. A structured online, cross-sectional survey was designed to facilitate collecting data from a large group of participants in a short period of time. Questions were selected based on three factors: the participants' demographics, their current PD activities, and their competency. Hence the questionnaire was divided into three sections, with a total of eight questions that were adopted from past studies, with the respective authors' consent.

Prior to final data collection, the survey was pilot tested. The Cronbach's alpha value was 0.934 and 0.907 for the independent variable PD activities and dependent variable lecturers' competency items, respectively, which reflected good reliability of the instrument. The sample of lecturers was randomly selected among four HEIs. Contacts were established from institutes and requested to assist in administering the online questionnaire through email to all the lecturers

working in their institute. The data collection period for institutes varied, based on their responsiveness; it took approximately four weeks to complete data collection. A total of 171 lecturers participated, which included both full-time and part-time lecturers from two public and two private institutes in the Maldives. Only 129 of the respondents completed the survey, and theirs were the responses used for the study.

Data were analyzed employing the steps explained by Cresswell (2012) to analyze quantitative data. The first step is to prepare and organize the data collected from the survey questionnaire. This was done by first creating a codebook, which is a list of scores assigned to each question response in the questionnaire. The Statistical Package for Social Sciences (SPSS) version. 27 was used to analyze the data. Correlation analysis was done to achieve the purpose of this study. This was followed by reporting and interpreting the results.

4. Findings

Characteristics of Respondents

Participants' characteristics and information provided an exact representation of lecturers in Maldives HEIs. A summary of respondents' characteristics is presented in Table 3. There were 99 female (63.5%) and 57 male (36.5%) respondents, showing a majority of female respondents. A significant percentage of participants (116, 74.4%) had a master's degree, and 5 (3.2%) participants had a diploma only. An additional 22 (14.1%) and 13 (8.3%) respondents had a bachelor's degree and a doctorate, respectively. With respect to years of teaching experience, 26 (16.7%) respondents had less than three years of experience, while 75 (48.1%) respondents had three to ten years of experience. Another 43 (27.6%) and 12 (7.7%) respondents had 11 to 20, and more than 20 years of experience, respectively.

Table 3: Characteristics of Respondents

	Number (N)	Percentage (%)
Gender		
Female	99	63.5%
Male	57	36.5%
Age		
18 to 25	3	1.9%
26 to 35	46	29.5%
35 to 45	78	50.0%
46 and above	29	18.6%
Education Level		
Diploma	5	3.2%
Bachelor's degree	22	14.1%
Master's degree	116	74.4%
Doctorate	13	8.3%

Years of Experience		
Less than 3 years	26	16.7%
3 to 10 years	75	48.1%
11 to 20 years	43	27.6%
More than 20 years	12	7.7%

Correlation between lecturers' PD activities and their competency

The correlation between PD activities and competency was examined by first carrying out a test of normality to determine whether the sample was drawn from a normal population. The normality test was carried out with a p-value of 0.05. Results of the Kolmogorov-Smirnov tests for both independent variable PD activities and dependent variable lecturers' competency of the study showed PD activities D (129)=0.156, p=0.00, and lecturers' competency D (129)=0.099, p=0.003 (Table 4). Since p-values for both the variables were <0.05, the null hypothesis, which states that data are not significantly different from a normal population, is rejected, meaning the sample was not drawn from a normal population.

Table 4: Kolmogorov-Smirnov[a] Test of Normality

	Statistics	**df**	**Sig.**
PD Activities	0.156	129	0.000
Lecturers' competency	0.099	129	0.003

a. Lilliefors Significance Correction

Since the variables were not normally distributed, and data were ordinal, Spearman's correlation analysis of alpha 0.05 was run to determine the correlation between PD activities and lecturers' competency. Table 5 shows the output SPSS produced by the Spearman correlation analysis. It is evident that there was a weak, positive correlation between PD activities and lecturers' competency, which was statistically significant; $r_s(129)=0.232$, p=0.008 as the p-value was <0.05. Thus, the variables tend to increase together and the null hypothesis, which states that there is no significant correlation between PD activities and competency of lecturers at HEIs of the Maldives, is rejected. This indicates that there was a weak positive correlation between PD activities and lecturers' competency at HEIs of the Maldives.

Table 5: Spearman Correlation

			PD Activities	Lecturers' competency
Spearman's rho	PD Activities	Correlation Coefficient	1.000	0.232**
		Sig. (2-tailed)	.	0.008
		N		129
	Lecturers' competency	Correlation Coefficient	0.232**	0.003
		Sig. (2-tailed)	0.008	.
		N	129	129

**. Correlation is significant at the 0.01 level (2-tailed).

Spearman's correlation was also carried out to determine the correlation between the dimensions of PD activities and the two core competencies. Table 6 shows that structured, collaborative, and individual PD activities were positively correlated to professional and ICT competency. Further the strength of the correlation was weak and statistically significant. On the other hand, the correlation between accredited PD activities and core competencies was very weak and statistically insignificant.

Table 6: Correlation between PD Activities and Core Competencies

Variables	1	2	3	4	5	6
1. Structured PD	1.000					
2. Collaborative PD	0.669**	1.000				
3. Individual PD	0.626**	0.735**	1.000			
4. Accredited PD	0.465**	0.526**	0.611**	1.000		
5. Professional Competency	0.234**	0.289**	0.213*	0.059	1.000	
6. ICT Competency	0.203*	0.194*	0.220*	0.109	0.638**	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5. Discussion

A strong positive correlation between PD activities and lecturer competencies was expected. However, the findings revealed a weak positive, but significant correlation, meaning the results did not turn out as they did by chance, but that a weak positive correlation exists. Thus, the null hypothesis regarding the correlation between overall PD activities and lecturers' competency at HEIs of the Maldives was rejected. This weak correlation was found to be significant between the dimension of PD activities and lecturers' competency, with the exception of accredited PD activity and lecturers' competency.

Past studies have found fairly consistent results. One-on-one training, webinars, phone conferences, and self-study were found to be significantly related to the level of competence, although face-to-face and online courses were not (Echols et al., 2018). Another "positive and remarkable" correlation was found between PD and professional knowledge and competence (Yuan et al., 2017), whereas a strong relation between training and teacher competence was found in Indonesia (Putri et al., 2019). Additionally, Wu et al. (2015) focused on identifying the correlation between variables of TPACK and those of ICT acceptance. They conducted their study after the completion of an ICT PD module and found that there was a strong to moderate correlation between variables of TPACK and those of ICT acceptance, except between technological knowledge and the usefulness of ICT.

In contrast to the strong positive correlation between PD activities and lecturers' competency found in previous studies, this study resulted in a weak positive correlation, implying that the PD activities in HEIs of the Maldives are not sufficiently effective. It is also possible that PD activities conducted do not cater for the needs of lecturers, and a culture where structured and individual PD

activities is not efficiently established. Time, money, and lack of human resources could be underlying factors that influence PD activities.

As mentioned before, although efforts have been made in past years to improve the PD activities provided in HEIs of the Maldives, it will take time to see significant impacts of PD activities on the different aspects of lecturers' competency. Therefore, it appears that the weak positive correlation found in this study could be the beginning of a successful, strong relationship between PD activities and lecturers' competency. It is also evident from the findings that all lecturers participate in some form of PD activity. This indicates their interest and provides an opportunity for institutes to provide adequate and effective PD activities. For instance, the mandatory PD sessions held at Maldives HEIs could be better designed and made more appealing by creating topic-based PD activities according to lecturers' needs and demands.

6. Conclusion

Past studies have repeatedly reported on the crucial role PD plays in enhancing skills and knowledge and keeping up with the latest tools and trends in the professional field. Since this study has examined how lecturers' PD activities correlate to their competencies, this result helps to decide which areas to focus on, in terms of lecturers' performance, in conducting PD activities in the future. Owing to the weak correlation between PD activities and lecturers' competency, it is also important to create a culture that encourages PD, focuses on providing effective PD activities by maintaining certain quality standards, and perhaps monitors competency development. This could be achieved by assessing the knowledge and skills gained before and after a PD activity and identifying the areas and topics lecturers require in their PD sessions. One main limitation of this study is that it was conducted exclusively for Maldives higher education institutes, which are young and going through rapid changes. Hence, the findings of this study are limited to the Maldives higher education, and the results might change if the study were to be repeated at a later time.

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APPENDIX A
SURVEY FORM FOR HIGHER EDUCATION LECTURERS IN MALDIVES

SECTION ONE: GENERAL INFORMATION

In responding to the questions in this section, choose the appropriate box.

1.1 At which of the following higher educational institutes are you currently employed?

☐ Public institute
☐ Private institute

1.2 What is your gender?

☐ Female
☐ Male

1.3 How old are you?

☐ 18 to 25
☐ 26 to 35
☐ 36 to 45
☐ 46 and above

1.4 What is your highest level of formal education completed?

☐ Diploma
☐ Bachelor's Degree
☐ Master's Degree
☐ Doctorate
☐ Other (Please specify)

1.5 How many years of experience do you have in teaching in the higher educational sector?

☐ Less than 3 years
☐ 3 to 10 years
☐ 11 to 20 years
☐ More than 20 years

1.6 Are you currently taking any academic programs or online certified programs as a means to develop your teaching profession?

☐ Bachelor's degree
☐ Master's degree
☐ Doctorate
☐ Other (Please specify)
☐ No

SECTION TWO: PROFESSIONAL DEVELOPMENT ACTIVITIES

2.1 How strongly do you agree with the following professional development activities to improve your competency? *(Competency refers to different skills, knowledge, understanding, behaviors and characteristics one must acquire to succeed in their profession)*

Based on your opinion, choose one response for each statement.

	Strongly Agree	Agree	Neither Agree Nor	Disagree	Strongly Disagree
Structured	☐	☐	☐	☐	☐
a) Training *(Face-to-face or online).*	☐	☐	☐	☐	☐
b) Workshops *(Face-to-face or online).*	☐	☐	☐	☐	☐
c) Seminars/conferences *(Face-to-face or online).*	☐	☐	☐	☐	☐
d) Lectures.	☐	☐	☐	☐	☐
Collaborative	☐	☐	☐	☐	☐
e) Discussions with colleagues.	☐	☐	☐	☐	☐
f) Group meetings *(e.g., groups meet at department or faculty level based on shared interests related to education).*	☐	☐	☐	☐	☐
g) Meeting one-on-one with mentor/expert.	☐	☐	☐	☐	☐
h) Peer learning *(e.g., learning from your peers with their support through interaction).*	☐	☐	☐	☐	☐
i) Collaborative research.	☐	☐	☐	☐	☐

Individual	☐	☐	☐	☐	☐
j) Reflective action research *(Reflective action research is the process of bringing transformational changes to one's action after reflecting on and researching it).*	☐	☐	☐	☐	☐
k) Reading books and professional journal articles relevant to your discipline.	☐	☐	☐	☐	☐
l) Following relevant social media platforms.	☐	☐	☐	☐	☐
m) Individual research.	☐	☐	☐	☐	☐
Accredited					
n) Academic programs *(e.g., degree, master's, PhD).*	☐	☐	☐	☐	☐

SECTION THREE: LECTURERS' COMPETENCY

3.1 How strongly do you agree or disagree that the professional development activities you have engaged in have improved your competencies mentioned below?

Based on your opinion, choose one response for each statement.

	Strongly Agree	Agree	Neither Agree Nor	Disagree	Strongly Disagree
Professional Competency					
a) General knowledge of institutional structures and cultures *(e.g., policies, priorities, missions, other service units).*	☐	☐	☐	☐	☐

b) Knowledge of current issues and trends in higher education.	☐	☐	☐	☐	☐
c) Knowledge of instructional development *(curriculum and course development).*	☐	☐	☐	☐	☐
d) Ability to provide students with relevant information to explain the points of the subjects.	☐	☐	☐	☐	☐
e) Ability to provide timely feedback about student progress of the course.	☐	☐	☐	☐	☐
f) Strategic planning skills.	☐	☐	☐	☐	☐
g) Project management skills.	☐	☐	☐	☐	☐
ICT Competency					
a) Knowledge of educational technology.	☐	☐	☐	☐	☐
b) Ability to use online tools to enhance teaching and learning.	☐	☐	☐	☐	☐
c) Ability to use effective strategies for teaching online and/or blended/hybrid learning environments.	☐	☐	☐	☐	☐

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Thank you for taking the time to fill this questionnaire.