Employee Training Needs Assessment for PhD Candidates among Academicians: Evidence from Public Universities in Malaysia

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Abstract

BACKGROUND: *Employee training needs assessment (TNA) is a critical human resource management function for academicians in both public and private organizations. It also often considered the most important step among the stages of training.* ***OBJECTIVE:*** *This paper attempts to highlight an employee training needs assessment for PhD candidates among academicians in Malaysian public universities.* ***METHODS:*** *Qualitative face to face in-depth interviews were conducted with twenty one lecturers from seven public universities in Malaysia. All of them were furthering their PhD studies in the field of Social Science. A framework analysis was conducted by using the ATLAS.ti software version 7.* ***RESULTS:*** *The researchers identified eleven major themes related to an employee training needs assessment for a PhD candidate; the training of (1) research methodology, (2) supervision, (3) writing and publishing journals, (4) procedural management, (5) sharing experience, (6) financial, (7) motivation, (8) religious knowledge, (9) spouse training, (10) health, and (11) language courses.The implication of this study showed that few of the training aspects above were needed and suggested by them, especially before they pursued their doctorate studies.* ***CONCLUSION:*** *An employee training needs assessment for PhD candidates is an important strategy to support them becoming more confident and highly committed to succeed. This will boost their concern to adopt appropriate PhD training needed in order to minimize the duration of study delay. Several recommendation have also been discussed in this research.*

Key Words: Training Needs Assesment (TNA), PhD candidate, Public Universities

1. Introduction

Achieving Vision 2020 requires a holistic and focused approach. There are five key strategic thrusts identified to achieve the inspirations of the Tenth Malaysian Plan that matches with this vision. One of the thrusts is developing and retaining a first-world talent base through raising graduates' competency. Apart from that, the quality of academic staff as academicians can be enhanced by increasing the number with PhD holders, with a target of 75 percent in public research universities and 60 percent in other Malaysian public universities (Tenth Malaysian Plan, 2010-2015). To achieve this target, the Malaysian government offers scholarships and sponsors lecturers for the purpose of increasing the number of PhD holders in public universities.

In addition, the Government has also set a target of having 60,000 PhD holders by 2023 under the implementation of the MyBrain15 programme (The 2015 Budget Speech of Malaysian Prime Minister). 6,195 PhD candidates among lecturers and academicians have been sponsored by the Ministry of Higher Education Malaysia from 2006 to 2010 (Administration Circular number 1, Ministry of Higher Education, 2011). Unfortunately, the number of sponsored lecturers who successfully graduated on time (GOT) is still low at approximately 27.83 percent (Administration Circular number 1, Ministry of Higher Education, 2011). It could be because there is less training provided for the PhD candidates. This issue affects the goal of the Ministry of Education Malaysia of increasing the number of PhD holders (Tenth Malaysian Plan, 2010-2015). Therefore, training is a major tool for the development of human resources in any organization or institution. Institutions are spending millions of dollars for training to develop and produce their human capital as an invaluable asset (Sherazi et al., 2011). However, to what extent are these training effective for developing their employees? This is the essential question often asked to judge the effectiveness of training programs. That is why before conducting any training, the first thing that what we need to do is conducting training needs assessment among the employees.

Based on this scenario, it is crucial to scrutinize the training needs assessment for academicians in order to increase the number of sponsored lecturers who can successfully graduate on time and minimize the duration of delay of their PhD studies. Further studies revealed that a needs assessment is the process of determining an organization's training needs (universities' PhD training needs) and person analysis or employee needs (type of PhD training needed by academicians) which seeks to answer the question of whether the employee's and organization's needs, objectives and problems can be addressed by training (Arthur et al., 2003; Tracey, 2004; Gupta, 2007; Altschuld and Lepicki, 2010).

An employee training needs assessment is a critical part in the training system. It provides the data for determining and scrutinizing who needs to be trained, what kinds of PhD training programs are needed, and how the results of the training programs are evaluated after the training needs assessment is implemented (Walter and Moshe, 2000). All of these elements are essential in developing good quality individuals (employee), improve organizational performance and invest in the right training methods. Besides that, an employee training needs assessment among academicians seeks to match the right training to the right PhD candidate and proposes the right model of PhD training needed by them before and while furthering their PhD studies. Through providing the ideas of the right model of PhD training needs for academicians, PhD candidates can equipped themselves to be well prepared in order to plan their strategy to graduate on time and learn how to overcome their PhD problems, especially when they actually undertake their PhD studies.

2.0 Literature Review

The Doctor of Philosophy (PhD) is the highest academic degree honored by universities around the world. A key factor of a PhD student's experience is the transition to adapt into the new culture and context within the higher levels of education (Park, 2005). Many institutions, either public or private universities or college universities conduct induction programmes or PhD orientation training programmes that help new doctoral students adjust to their new status as novice researchers. These programmes involve intellectual and independent researchers, professional and social adaptation, anxiety concerning time and productivity, intellectual life, and supervision (Hockey, 1994). Previous studies on the doctoral experience suggest that PhD students face many problems, obstacles and difficulties in their studies (Appel & Dahlgren, 2003; Wright, 2003).

Therefore, there is a need to obtain a deeper understanding of the nature of PhD studies by assessing PhD students' training needs, especially for academicians and lecturers before they face the journey towards obtaining their PhDs. All of these problems can be tackled through the right training methods and suitable approaches based on their problems as well as how these problems relate to their life during the completion of their PhD studies. There are four major problems identified in the experience as PhD candidates, which are: "being at cross purposes with supervisors such as between productive and difficult relationship with supervisor, finding few supporting structures, isolation and confusion over resources" (Edwards, 2002; Dinham and Scott, 1999).

It shows that supervision program is one of the factors that enable to contribute for the PhD training needs of academicians. Furthermore, review of literature reveals that there are three factors influencing the success and failure of PhD candidates to graduate on time (GOT). First, the attitude and behavior of PhD candidates during their studies. Second, the research and academic process. Third, the student's and family's health (Administration Circular number 1, Ministry of Higher Education, 2011; Mohd Zain, Mohaiadin, Hamzah, 2011).

A recent study by Morrison (2015) found that supervisors perform a major role in supporting the developmental writing of PhD students in university. It enables supervisors to influence the completion time for their students' PhD studies. In addition, a good supervisory relationship is characterized by good communication, willingness to listen, and flexibility to help PhD students with their additional learning processes and needs (Collins, 2015). Whereas, Nethsinghe & Southcott (2015) pointed out that both supervisor and supervisee need to be committed, be prepared to take risks, be brave, trust and respect each other at all times, and be reflective and persistent in the process of the PhD study. According to Devos et al., (2015), a good match between a PhD candidate and supervisor is vital as a successful PhD weapon for the completion of PhD studies. Besides that, both parties need to have mutual understanding and agreement in achieving their expectations and responsibilities as supervisor and supervisee. Through this way, it empowers the PhD candidate to finish his/her study in a timely manner and avoid any conflict between supervisor and the PhD student. It shows the importance of supervision training among PhD candidates as one of the approaches to ensure completion of students' PhD studies.

It is vital to provide the relevant training which actually satisfies the needs and requirement of employees, thus the need for an employee training needs assessment. That is why the efficiency of any organization or institution such as Malaysian public universities depends directly on how well its employees (academicians/PhD students) are trained and what kinds of PhD training needs are required to fill the gap. An employee training needs assessment is one of the methods to increase employee and organizational performance. This is a way to improve and develop employee performance through examining what is the nature of PhD training that they would like to undertake and is needed. In this case, academicians in Malaysian public universities as PhD candidates need to complete their PhD studies in a certain period of time, usually within three to five years based on the requirement of their universities (Sadlak, 2004, Stock et al., 2009; Wamala, Ocaya and Oonyu, 2012). Therefore, TNA should be conducted for all academicians who are PhD candidates to find the weaknesses and develop the strengths through the identification of accurate PhD training which suits with their needs and problems.

3.0 Research Methodology

A qualitative design with face to face interviews was used to gather data using a random sampling technique. The participants of this study are academicians who want to pursue or are furthering their doctorate studies, consisting of twenty one lecturers from seven public universities in Malaysia. All participants are pursuing their PhD studies in the field of Social Science. The interviews were semi-structured and had used an informal sequence of questions for the candidates to answer. The researchers analyzed the obtained data manually using the qualitative software ATLAS.ti version 7. ATLAS.ti provides valuable tools in academic research, particularly for the social science discipline. The study aims to scrutinize employees' training needs assessment for PhD candidates among academicians in Malaysian public universities.

3.1 Instruments

Data were collected using face to face interview questioning route (sequence of questions). Twenty one lecturers of seven public universities in Malaysia who plan and are on-going to further their doctorate studies were interviewed. The questions were semi-structured, progressing from essential questions (e.g., *"What your needs of training are before pursue of the doctorate study?"*), to complex transition and key questions (e.g., "*What are the need of training for PhD candidate to complete their study on time?").*

3.2 Interviews

Face to face semi-structured interviews (August until December 2014) were conducted among twenty one academicians who are PhD candidates working as staff at Malaysian public universities. They are pursuing their PhD studies in the field of Social Science. According to Patton (2002), characteristics of semi-structured interviews are the freedom of data inquiry from respondents, increased reliability of data collected by allowing for clarification, deeper investigation, and participant recollection. The types of semi-structured interviews are "well suited for the exploration of the perceptions and opinions of respondents regarding complex and sometimes sensitive issues and enable probing for more information and clarification of answers" (Barribal and While, 1994: 330). Interviews took one hour per session and included questions related to employees who are PhD candidates' training needs assessment, especially before and while pursuing their PhD journey and the programmes that can help them complete their doctorate studies. Interviews were conducted by the researchers at a time and place chosen by the participants.

All interviews were audio-taped with consent, transcribed verbatim, and stored for analysis. Questions such as: *"What are the training needs of a PhD candidate for you to succeed in completing your doctorate study?"* were asked to the respondents.

Below is depicted the background information of respondents.

Table 1: Interviewees' Profiles

No (R)	Gender	Public University	Field of Study (Social Science)
1	Female	Universiti Sains Islam Malaysia (USIM)	Economy
2	Male	Universiti Sains Islam Malaysia (USIM)	Economy
3	Female	Universiti Sains Islam Malaysia (USIM)	Jurisprudence
4	Female	Universiti Sains Islam Malaysia (USIM)	Jurisprudence
5	Male	Universiti Sains Islam Malaysia (USIM)	Islamic Studies
6	Female	Universiti Sains Islam Malaysia (USIM)	Islamic Studies
7	Male	Universiti Putra Malaysia (UPM)	Education
8	Female	Universiti Malaysia Sarawak (UNIMAS)	Business
9	Female	Universiti Malaysia Sarawak (UNIMAS)	Business
10	Female	Universiti Malaysia Sarawak (UNIMAS)	TESL
11	Female	Universiti Utara Malaysia (UUM)	Accounting
12	Female	Universiti Utara Malaysia (UUM)	Accounting
13	Female	Universiti Utara Malaysia (UUM)	Business
14	Female	Universiti Utara Malaysia (UUM)	Human Resources Management
15	Female	Universiti Malaysia Kelantan (UMK)	Economy
16	Male	Universiti Malaysia Kelantan (UMK)	Linguistic
17	Female	Universiti Sultan Zainal Abidin (UniSZA)	Islamic Studies
18	Female	Universiti Sultan Zainal Abidin (UniSZA)	Islamic Studies
19	Female	Universiti Sultan Zainal Abidin (UniSZA)	Child Welfare
20	Male	Universiti Utara Malaysia (UUM)	Communication
21	Female	Universiti Kebangsaan Malaysia (UKM)	Education

3.3 Data Analysis

The researcher used content analysis by using ATLAS.ti software version 7. Miles and Huberman (1994) and Merriem (1998) pointed out that the content analysis method is used to analyze interview data and is a technique that is frequently used in qualitative studies (Burn, 1995). Qualitative research is a form of scientific analysis that extends to different disciplines, fields, and consists of many varied methods (Denzin & Lincoln, 2000). Through data analysis, the researchers aim to examine the data regarding the PhD training needs assessment among academicians as employees in Malaysian public universities. Based on the data, the researchers classified all of the codes and themes related to the research questions, the links to the data, and the expression of information from the face to face interviews with PhD candidates during data collection. The interview transcripts were identified and coded to find out the central themes of the training needs for PhD candidates from all of the respondents. The information was analyzed using content analysis. Content analysis is a common approach to qualitative data analysis and is defined as a process of coding and identifying themes or patterns (Hsieh & Shannon, 2005). It is a valuable method of data analysis when some unit of meaning and interpretation is required in this qualitative study (Schreier, 2012).

4.0 Results

The data analysed using ATLAS.ti version 7 revealed that there are 11 major themes related to the training needs assessment model for a PhD candidate in social science; the training of (1) research methodology, (2) supervision, (3) writing and publishing journal, (4) procedural management, (5) sharing experience, (6) financial, (7) motivation, (8) religious knowledge, (9) spouse training, (10) health training, and (11) language courses. All of these themes were concluded from the interviews of twenty one respondents (R1-R21) who are PhD candidates and academicians in Malaysian public universities.

Based on the results, there are eleven core themes of employee training needs assessment for PhD candidates among lecturers and academicians of public universities in Malaysia before pursuing their doctorate study. It can be seen from the data in Table 1 that five subthemes support the first theme (training needs of research methodology), and they are: (i) software, (ii) specific area of study, (iii) preparation workshop, (iv) literature review, and (v) research methodology for Qualitative researchers. Eight of the respondents (R1, R4; USIM, R 18; UNISZA, and R11, R12, R13, R14, R20; UUM) as lecturers in the field of social science were felt that all of these research methodology training are very important and useful for them to attend for their PhD study (see table 1 for details expression).

Table 1: Theme "Research Methodology": Subthemes and examples.

Subthemes	Examples of meaning units
Software	If there's a *software* workshop provided for research purpose, such as SPSS, Mendeley, or ATLAS.ti, It's really helpful for us. (R11, UUM).
	Regarding the *software* such as SPSS, I have some knowledge about it, ways of using it, but it is still insufficient for research purposes. I need to learn more about it. (R12, UUM))
	I practiced SPSS for my degree and master projects, and I had left it behind for several years. The *software* workshop like SPSS course provided by my university is inadequate for me to restore my previous SPSS analytical skills. (R20, UUM)
Specific area of study	Preparation courses should be *separated by fields*, and there are plenty of topics to cover. It can't be achieved when you put all the candidates together regardless their fields. (R14, UUM)
	Research Methodology course should be *concentrated by fields*. Not every research is obligated to use SPSS. We, in medical course may use it, but not everyone uses it. (R4, USIM)
Preparation workshop	I really hope that there should be any *PhD's preparation* workshops provided and conducted. It's vitally important. (R18, UNISZA)
	I think the essential one is the *PhD's preparation workshop*. It is because those who want to further their study is circa 20's may not have sufficient knowledge and experience in doing research. (R13; R14, UUM)
Literature Review	How to write a proper *literature review*? There should be a workshop for it. (R20, UUM)
Qualitative research	I prefer that the Research Methodology course should be taught in broad-spectrum for both quantitative and qualitative researchers. What we have now is that it was taught mainly to cater quantitative research. I need specific workshop on *qualitative research*. (R1, USIM)

The second theme is the needs of supervision training. The table two revealed that three subthemes rose in which supervision training consist of (i) technique how to deal with supervisor, (ii) technique how to choose a good supervisor and (iii) technique sharing session with experience' supervisors. The entire element of these subthemes will boost the moral support and encourage their passion in PhD journey. There were eight of respondents (R13 until R20) spoke out for the needs of supervision training in this study (see table 2). It shows that this training is essentials for them in facing their doctorate study.

Table 2: Theme "Supervision Training": Subthemes and examples.

Subthemes	Examples of meaning units
Technique how to *deal* with supervisor	"Better we should have the workshop on how to ***build up*** the relationship with the supervisor and other related matters. The slot focus on "How to manage your supervisor" (R20, UUM).
	One specific program that emphasizes to ***manage*** the relationship with supervisor (R18, UNISZA).
	In terms of supervision, I want to learn how to achieve **supervisor's target** such as graduating on time. He/she has probably demanded and has own standard. Achieving the target for my PhD study can be frightening sometimes. That why I need this workshop that focuses on ***dealing with supervisor***. (R15; 16, UMK).
	There is a case of a PhD candidate who is studying overseas that has a problem in ***dealing with a difficult supervisor***? We really need a workshop that can guide us to deal with difficult supervisors (R17; 19, UNISZA).
	There is a case of a PhD candidate who does not know who his/her supervisor is. Therefore, it's really vital for us to attend the supervision workshop how to ***deal with our supervisor*** (R18, UNISZA).
Technique how to *choose* a good supervisor	But for those who want to go overseas, they want to know about how they can ***choose their supervisors***. People always say whether or not we finish our PhD depending on who supervisor is. It is important to learn and attend the program to choose a supervisor. (R19, UNISZA).
	It is a good idea to have one-day session ***to choose and learn about supervision***. We can improve our knowledge on how to get a good supervisor in our fields. This is because supervision will give a long term effect for our PhD study. We need to choose the right supervisor for the right PhD fields (R13, UUM).
Technique *sharing session* with experience' supervisors	What worries me is that I have no experience yet in Europe. I am wondering how I want to survive if there is a problem in terms of cost of living and face with my *supervisor*. So, this course is really needed that talk about ***sharing experience*** about supervision. (R17, UNISZA).
	But if you say you want to conduct a supervision workshop and want tackle for ***sharing session*** with experience supervisors. This is a good step but the speaker should be from the same fields of their study. This is because they always mix together, and they are from multiple areas of PhD study. For me, that is not suitable. It will help to develop a good relationship with our supervisor (R14, UUM).

In addition, the third central theme a training need of PhD candidate is writing and publishing journal. Only one participant (R19) has been spoke out about it and raise a concern regarding this matter, as we can see in table 3.

Table 3: Theme "Writing and Publishing Journal Training": Subthemes and examples.

Subthemes	Examples of meaning units
Reading and Writing Journal	When we want to ***read journal***, we basically want to get a clear idea about it. So, we can ***write our journal*** well. There should be a course conducted on how to have a better understanding after reading a journal (R19, UNISZA).

Furthermore, the procedural training is the fourth main theme (see table 4), while research procedure, culture, family procedure, besides law and regulation are the subthemes of this study. Most participants from UNISZA, UUM, UPM, UMK and USIM agreed that research and family procedure training were essentials that can assist them for the preparation of their PhD journey. However, R15 point out that the culture' information is needed for this respondent. While, R11 and R1 raised a concern about law and regulations which are differ from the place they came from, which made a procedural training was one of the subthemes that could be provided in this workshop.

Table 4: Theme "Procedural Training": Subthemes and examples.

Subthemes	Examples of meaning units
Research Procedure	We need a course about ***research procedures***, particularly about university and research-matter. If we seek independently, maybe we get an oversight. If we seek from the supervisor, not all supervisors are able to guide us about procedural things. (R19, UNISZA).
	There's a need for a ***research procedure*** course, and we should tackle the potential problems, as "What should we do if our supervisor is transferred to other universities? Deceased? Retire?". (R11, UUM).
	Research procedure should be very clear for all PhD candidates, like "How to apply for a study extension? Register the subject and unregister it?". (R7, UPM).
Family Procedure	It's vital. I have read someone's experience that doesn't have any ideas how to find accommodation and ***school for their kids***. That related with family matter. Its better we have this session on this aspect. (R20, UUM).
	I keep thinking about ***my family especially for my kids,*** and which school that is suitable for them? (R15; R16, UMK).
Culture	I need some information about new places where I'll spend my years there. I need to know their ***culture and how to adapt*** with the community etc. (R15, UMK).
Law and Regulations	If we get a clear idea about going to overseas, it's vitally important for us to be informedand have a one program about the ***law and regulations*** in overseas. But need to be specific with the country itself, don't just combine it together with other country. It is because different country has their different law. (R11, UUM).
	I fly together with my spouse, and he needs to work part time, so we should understand the ***rules and regulations***. These are the things that we should be clear and understand. I strongly prefer we have a program on this matters (R1, USIM).

Meanwhile, the fifth theme is sharing experience training (see table 5). Twelve participants from five public universities (R2, R4, R6; USIM, R7; UPM, R9; UNIMAS, R11, R13, R14, R20; UUM; and R17, R18, R19; UNISZA) expressed their ideas on sharing experience training were needed and important for embarking their PhD journey. The subthemes content of this training can be shared in terms of (i) study, (ii) life, (iii) managing mental and emotion, (iv) target to graduate on-time (GOT) and (v) sharing the positive PhD story. An interviewees agreed that in order to ease their concern and fear, the positive PhD journey story was needed, in which R9 and R13 suggested the story should focus on telling the positive side, not the negative one, which might frighten the PhD candidates and thus discourage them from continuing their PhD study.

Table 5: Theme "Sharing Experience Training": Subthemes and examples.

Subthemes	Examples of meaning units
Study	Maybe Ministry of Education Malaysia can invite any fresh PhD holder to share their *experience*. It is more valid and they have current information besides it might beneficial for us. They can share how to study overseas. Sometimes we invite someone that who has already finished his/her PhD study after five years to give a talk. In my opinion, I strongly prefer if we invite an outstanding fresh PhD holder for this session. As a result, we have new things that we should know especially in terms of *recent PhD study*.... (R17, UNISZA).
	Realistically, we already know how much the burden for PhD study is. Then, we also overlook the preparation of PhD study. It is a good if we have a talk from someone who has already had the experience and a good story to share with. The idea is not to promote the universities and its postgraduate programs, but the main focus should also focus on *how to survive during the PhD study*. (R4, USIM).
	Mentally, I love sharing *experience about PhD study*. The focus should be mainly about preparing students how to finish their PhD study successfully. (R17; R18; R19, UNISZA).
Life	When I was attended my Research Methodology class, we had a slot for sharing our experience of *life* of the PhD holder at the end of the session. One of the students shared his experience such time management. However, I don't think the sharing experience is enough. It is just an hour session. I think that it is not enough. I suggest that we should have a special sharing experience session for one day for the sake of having a better understanding in surviving our life as a PhD holder. (R20, UUM).
	There should also be a sharing session about *living* and studying abroad conducted by lecturers who used to study there. They may have different experience in terms of the laws, visa, and religions. Their knowledge can be useful and beneficial for us (R7, UPM).
	This kind of sharing session should be conducted for a day or a half day as it can give us an overview about how to *live* abroad especially to those who have not lived there (R2, USIM).
	I strongly believe this sharing session on *life of PhD* is a good way for us to know the culture of the country that we are going to study. We can also have a face to face conversation with those who have studied abroad (R6, USIM).
Mental and Emotion	This sharing session can be a good platform to prepare us *mentally and emotionally*. It should be conducted as we may think that we are prepared enough but we can be very vulnerable inside (R20, UUM).
Fresh Graduate	This sharing session should be conducted by outstanding of *PhD graduate* who has just finished his/her study as they can share their experience with us. It is strongly recommended that those who Graduate on Time (GOT) are the best to share their experience (R14; R11, UUM).
Positive PhD Story	When we want to share our experience with others, the story should focus on telling the *positive side* of the story as telling the negative side of the story might intimidate the PhD candidates and thus demoralize them from continuing their study (R13, UUM).
	The reason is we want our PhD students to feel positive despite the hardship they are going to endure. *Positivity* may help them enduring their journey well (R9, UNIMAS).

Out of twenty one participants who responded to question of financial training needs, there were only three participants (R4, R5; USIM and R14; UUM) agreed that financial training were essentials for academicians' PhD candidates. Specifically, money management and experience of sharing session are subthemes in this training and could be conducted by an expert person, as stated in table 6.

Table 6: Theme "Financial Training": Subthemes and examples.

Subthemes	Examples of meaning units
Money Management	*Financial training*… for me it's good if we have this course. (R14, UUM)
	This course is important as we can gain useful information how much saving we need and how to manage our *financial planning* appropriately, etc. (R5, USIM).
Experience Sharing	The PhD study is very burden. It is too heavy which we may overlook the *financial issues*. It's good if we can hear from someone who had an *experience* about it. (R4, USIM).

A motivational training is another training needed by few participants (see table 7). There were only two participants felt that the training is essential for boosting the moral, as R11 from UUM suggested that university should pay visit to their PhD student regularly, that it for those who further their PhD in overseas. In addition, there are another two subthemes as concluded in table 7; self-motivation and group motivation that stated by R4; USIM, R18; UNISZA and R20; UUM.

Table 7: Theme "Motivational Training": Subthemes and examples.

Subthemes	Examples of meaning units
Self-Motivation	The essential one of it is a *motivational course* for boosting the self-confidence. (R18, UNISZA).
	Sometimes the candidates feel they are mentally prepared, but in fact they are fragile inside. So if there's a course for those who want to engage with the problems to develop *self-motivation*, it should be conducted by the experience ones. (R20, UUM).
University's Visit	I suggest there should be a student's gathering. For example, UUM frequently sends their officers to visit their students and staff outside such as *University's visit* (R11, UUM).
Group Motivation	It would be a brilliant if we organize a gathering like "*Usrah*" (Islamic talk), discussions and etc. This is because it can be a platform for a problem sharing session, and organize a *motivational group* for PhD candidate. (R4, USIM).

Besides that, five participants (R12, R20; UUM, R16; UMK, and R17, R18; UNISZA) proposed religious training as part of the courses that should be provided. This is for those who want to further their PhD study, particularly in overseas. Table 8 shows the participants spoke out about *Tauhid* (spiritual) and *Fiqh* (practical) training are important for them to become well prepared and answering doubtful questions that related with the Islamic practice in abroad.

Theme 8: "Religious Training": Subthemes and examples.

Subthemes	Examples of meaning units
Tauhid / Akidah / Spiritual	The course of *"Akidah"* (faith) is really crucial. It should be conducted as well.(R17, UNISZA).
	For me, the course is important as it is not just about "Fiqh" and practical lessons only, but it also covers *spiritual lessons*. (R20, UUM).
Fiqh / Practical	It's essential particularly for those who might go aboard since different atmosphere makes different ruling (*Hukm*) in *Islamic practical*. (R18, UNISZA).
	It's vital especially those who fly overseas. We'll encounter disagreements (*khilaf*) in countless issues; *how to pray* in narrow circumstance? *How to pray and fast in other countries* where the day or night is continuous as Norway. There should be an explanation. (R16, UMK).
	The 'Fiqh" course should be included, and we should learn from the authority. If we are left to seek the information independently, maybe we get the wrong one. There are issues that need an explanation*, like prayer in flight*. If there's an expert, we can consult him easily and we can get a clear idea about what we have been wondering all this while. (R12, UUM).

Furthermore, nine participants (R9; UNIMAS, R15, R16; UMK, R17, R18; UNISZA, R11, R13, R14 and R20; UUM) agreed that dealing their spouse is challenging especially when they were brought together abroad for PhD studies. This training could be provided in order to educate their spouses. There were two subthemes related in this training that has been expressed by the participants, in which (i) spouse' understanding (SU) and (ii) family and emotional support (FES) as stated in table 9.

Theme 9: "Spouse Training": Subthemes and examples.

Subthemes	Examples of meaning units
Spouse Understanding (SU)	I would like to suggest that there should be a ***good understanding*** between a PhD candidate and his/her spouse. The spouse should be supportive to his/her partner. They need to know that doing PhD is not an easy thing to accomplish especially spouses who are not academicians (R17; R18, UNISZA).
	There should be a course to educate the spouse about life as a PhD candidate so they get an ***insight and overview about this***. It can be conducted to spouse whose partner is studying in Malaysia and abroad. (R20, UUM)
	University should organize this kind of course so the spouse will become ***more understandable***. (R16, UMK; R17, UNISZA).
	When signing the contract, there should be a ***good understanding*** between a PhD candidate and his/her spouse. (R15, UMK).
	This can help to prevent any ***misunderstanding*** that can lead to divorce or other problems related to marriage. (R11; R13, UUM).
	This course is vitally important to spouse who is not an academicians because they might not know what a PhD candidate is going through. A counselor may help them in ***understanding*** some possible problems that may arise in the future (R9, UNIMAS).
Family & Emotional Support (FES)	***Family and Emotional Support*** (FES) course should also be conducted. The reason is we need our family support. When we get support and assistance from our family, such as taking care of children, it will be easier for us to study well. Also, we may be able to finish our PhD successfully (R11, UUM).
	Family and Emotional Support (FES) is also important to those who are not married as they can study well when they know that they have their family who is supporting them. (R14, UUM).

Another major theme is health training. There's only one participant (R20) from UUM spoken the requirement of health training, especially about the insurance, as stated below in table 10.

Table 10: Theme "Health Training": Subthemes and examples.

Subthemes	Examples of meaning units
Insurance	I think it is necessary especially about the ***insurance***. If we fall sick, which free clinic we can seek for medical treatment. Which one is suitable? If there's a sharing session, I really appreciate if there is any health PhD training can be conducted. (R20, UUM).

The final one is training on "language course". Nine participants from four public universities (R1, R5; USIM, R21; UKM, R17, R19; UNISZA, R11, R12, R14, R20; UUM) addressed the problem and suggest their language course, particularly English as main requirement to further their study at overseas. There were focus on (i) International English Language Testing System (IELTS) and (ii) test of English as a foreign language (TOEFL).

Table 11: Theme "Language Course Training": Subthemes and examples.

| Subthemes	Examples of meaning units
English Courses (IELTS/ TOEFL)	***IELTS preparation*** courses should be conducted as it can prepare and motivate them to pass for this examination (R17; R19, UNISZA).
	IELTS preparation course can help students get the minimum scores that have been required by universities' abroad. If we fail to achieve the minimum grade, we have to repeat. This can be tedious, time consuming, and problem in terms of time and financial (R11; R12; R20, UUM).
	This course can help students who are not good enough in ***English***. They can learn how to score for another component (R14; R20, UUM).
	IELTS and TOEFL are very important especially to those who want to further their postgraduate study. If we do not take IELTS and TOEFL, we need to take any English classes at any language centers, such as British Council (R21, UKM).
	IELTS preparation course should be conducted either personally or in a big group. It also can be conducted for free (R1; R5, USIM).
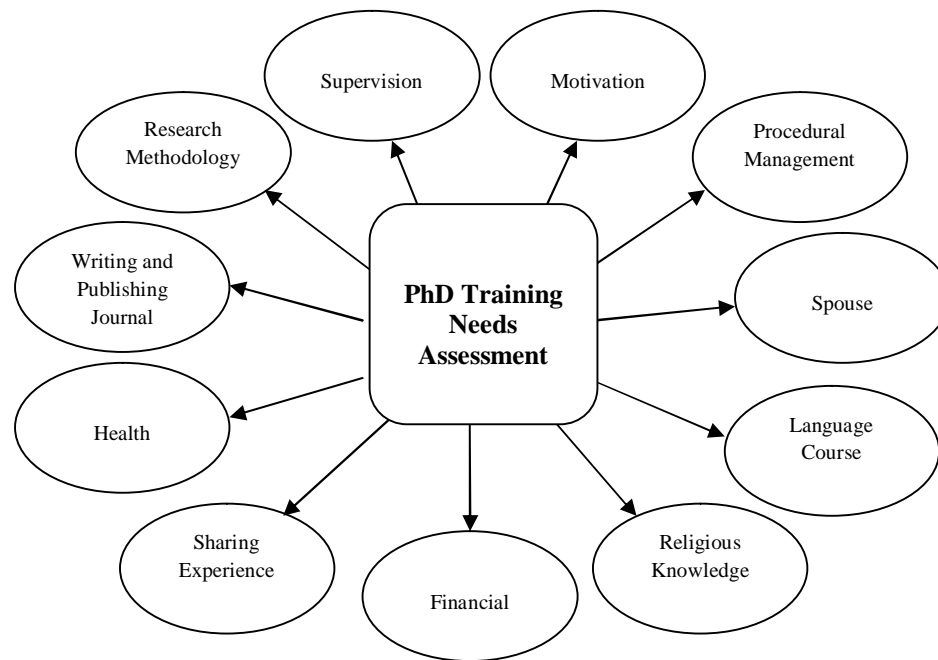
Figure 1: Model of PhD Training Needs Assessment

Overall, these results provide empirical evidence on the model of an employee PhD training that needs among academicians' PhD candidate in Malaysian public universities. Based on figure 1, there were eleven core themes that have been explored; the training of (1) research methodology, (2) supervision, (3) writing and publishing journal, (4) procedural management, (5) sharing experience, (6) financial, (7) motivation, (8) religious knowledge, (9) spouse training, (10) health training, and (11) language course. Most of the universities are increasingly challenged by government to produce high number of PhD holders among their institution. Therefore, investing the training program for a PhD candidate especially among the lecturers want to further their doctorate studies will valuable if majority of them are successful to complete their PhD studies.

4.1 Discussion

This study provides new insights into what are the suitable training needs required by academicians who are PhD candidates before they pursue their doctorate studies. These are the essential preparations needed to be taken by each individual PhD candidate in order to make sure they are well prepared to finish on time. The training needs assessment technique for PhD candidates in this study is an important strategy to support them to become more confident and highly committed to succeed. This method will boost them in terms of being concerned about the time and period of study given to the PhD candidates. Furthermore, every respondent do not want to delay their doctoral studies.

As a result, this research shows that there are significant implications for academicians in Malaysian public universities after exploring the PhD training needs that should be provided to them. Eleven broad themes emerged for employee PhD training needs among academicians, which are training of research methodology, supervision, writing and publishing journal, procedural management, sharing experience, financial, motivation, religious knowledge, spouse training, health and language courses. Previous research had focused on exploring academicians doing PhD studies related to doctoral supervision (Dinham and Scott, 1998; Aspland et al, 1999; Marsh et al., 2002; Bourke et al., 2004; Hasrati, 2005; Wisker, 2005; Grebennikov and Shah, 2007; Mikail and Siti Aishah, 2011; Pyh¨alt¨o et al, 2012; Pitchforth et al., 2012; Devos et al., 2015; Morrison, 2015; Collins, 2015; Nethsinghe & Southcott, 2015). While Nurhazani et al. (2015) stressed out that research methodology, writing and publishing research are included as research skills factors. Besides that, other parts of PhD studies have been identified, such as procedural management by Golde (2005), sharing experience of doctorate journey (Hockey, 2004; Alpine and Amundsen, 2007), sharing experiences of PhD holders in terms of the supervisory relationship

(Aspland et al, 1999; Hasrati, 2005, Pyḧalẗo et al, 2012), and financial factors (Bourke et al., 2004; Stock et al., 2009). These were found to be factors for the completion of PhD studies. Moreover, another previous research identified the motivational aspect as a way to inspire PhD candidates in their doctorate studies (Appel and Dahlgren, 2003; Kiley, 2009; Pyḧalẗo et al, 2009; Pitchforth et al., 2012). Brailsford (2010) found that third parties such as friends, colleagues, family members, and other academicians play a significant role in encouraging and motivating potential PhD students to start their studies. Therefore, universities can consider giving motivational workshops to academicians before they enroll in their PhD studies.

In summary, it is revealed that PhD studies is associated with supervision, research methodology, writing and publishing research, procedural management, sharing experience, financial assistance and motivational needs were explored by other researchers as factors needed for the completion of PhD studies. However, this study fills the gap by specifically exploring the needs of PhD training that can be offered and provided to academicians in Malaysian public universities before they further their doctorate studies. What is interesting in this data is that this study has found that spouse PhD training, Islamic religious PhD training, health training, and language courses contribute and are considered as new factors for the completion of PhD studies and the needs of PhD training that can be provided to PhD candidates. It was also revealed that all of these PhD training needs were suggested to the PhD candidates before and during their doctorate journey.

4.2: Limitation and Suggestion for Future Research

A limitation of this study is that the data was collected among academicians who are PhD candidates and at the same time serve as employees in Malaysian public universities. The main reason that this study focuses on public universities is due to the Ministry of Education Malaysia's concern that the number of PhD students sponsored by them who graduated on time is less than what it is supposed to be. Like other qualitative research, this study has certain limitations, particularly in regards to generalization, as the sample choice had focused on those who are pursuing their doctorate studies in the field of social sciences. For that reason, future research could be conducted among PhD students in various fields (e.g; science and technology) and the findings of PhD training needs among them might be different from those who are pursuing doctorate studies in the chosen research area. Additionally, this research uses a qualitative research design and the data were collected through face to face in-depth interviews. Future studies can use the mix method via quantitative and qualitative study in collecting data in order to have deeper understanding of the kinds of PhD training needed by PhD candidates among lecturers in Malaysian public universities. In addition, this would be a fruitful area for further work in private universities by using the same proposed PhD training needs assessment model for PhD candidates as guidelines. It will also expand this research to be based on quantitative research.

5.0 Conclusions and Recommendations

This paper shed new light on the employee training needs of academicians who are PhD candidates, give some ideas about the training needs that they want, and the styles of PhD training needs that could be used to enhance their career development for individual (PhD candidate) and organizational performance (university). The transmission of knowledge during the training needs assessment is essential for PhD candidates especially among new lecturers and academicians. However, while attention has been focused on lecturers who do not a PhD yet. Besides that, this study provided the necessary ideas that have often been suggested by PhD respondents while facing difficulties in the completion of their PhD studies. The evidence from this study revealed that employees' PhD training needs assessment among academicians before they pursue their doctorate studies. Eleven essential kinds of PhD training needs were found. The outcomes provide a unique perspective and offer new ideas to enlarge the body of knowledge around issues pertaining the completion of PhD studies and the needs of PhD training that can be provided and conducted for them. Hence, developing human capital among academicians who are PhD candidates could be enhanced through the right assessment of employee PhD training needs which aligns the needs of both individuals and institutions.

The responsibility as academicians and lecturers in universities will contribute to the development of the educational sector. However, recent scenario shows that there is the urgent need for academicians to further their studies in the PhD level or at least become PhD holders in order to become experts in their fields. By having a PhD, it enables them to enhance their career development and increase organizational performance for their university and the country. The results of this study suggests that an employee PhD training needs assessment should be provided among academicians in Malaysian public universities.

The ideas and experiences of how to manage the reality of ups and downs during the PhD journey and what are the PhD training needs suitable for academicians who are PhD candidates are valuabe to be shared and implemented.

Recommendation 1:　　Expert and experienced PhD holders in the same field should be appointed to conduct the employee PhD training needs.

Recommendation 2:　　The Ministry of Education Malaysia should allocate more budget and provide basic training to meet the needs of academicians who are PhD candidates.

Recommendation 3:　　The PhD training needs for academicians who are PhD candidates could be revised and reviewed frequently to meet the current demands in order to increase their individual and organizational performance.

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