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Enjoying and enduring: A Gaman (我慢) experience of Filipino doctoral science students in Japan as "Teachers as Learners"

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Abstract

Adult learners such as teachers and professors should engage themselves in adult education to become lifelong learners. Higher Education Institutions (HEIs) are providing professional development and adult education abroad which is shaped by patterns of social investment through crossing boarders or global dimensions in relation to building knowledge. A phenomenological method was used to provide a window in describing and analyzing the essence or essences of lived experience of five Filipino doctoral science students in Japan. Driven by two central questions: What does "teachers as learners" means to Filipino doctoral science students in Japan? and What characterizes "teachers as learners" in Japan?, a series of interviews were conducted. The responses to the research questions gave direction and focus which was provided with an in-depth personal perspective of this study. Through constant analysis and coding, the Periodic Table of Japan Experience as Teachers as Learners (PeTJET-L) emerged. The PeTJET-L showed the lived experience of the participants can be grouped into four themes or stages, namely: Enjoying, Enduring, Gaman and Teacher as Learner. The study revealed that the lived experiences of Filipino doctoral students in Japan provided them to become "gaman" demonstrating strength in facing academic difficulty and suffering. Moreover, their experiences developed them to become aggressive, independent, expectant, passionate and reflective learner who are subject expert, research scholars and educational leaders.

Keywords: Gaman; enjoying; enduring; teachers as learners; Japan; Philippines; phenomenology

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1. Introduction

The first global conference on science and society happened in 1999 at Budapest (Hungary) stressing the importance of "education for all" in the field of science. The 1999 Budapest Declaration state new commitments and agreements of 1,800 science stakeholders from 155 countries in principles and guidelines for shaping the course of science, research and science-society (UNESCO, 2016). Similarly, the basic science education of UNESCO (United Nations Educational, Scientific and Cultural Organization) Education sector, has the same intention of giving adequate and appropriate education for science and math teacher. UNESCO emphasized that there is a challenge in providing sufficient teachers who are good in content, process and teaching approaches. Although seems ambitious, this can be achieved by continuous in-service education and professional development with available supports and incentives (Andade, Esteves, & Neto, 2009).

According to Duane (2015) education leaders such as teachers, administrators and curriculum coordinators recognized the importance of continuous growth and learning for adult learners. It is also supported that available resources on developing professionals are focused only on "one-size-fits-all experience" of the teachers (Guskey, 2015). It is important that professional development relevant for teachers is focused on the work of the teachers that provide them opportunities to make choices about their own learning and collaboration (Mangali, 2016). The Learning Innovations at WestEd (2002) states that professional development is common in all countries; the need in scaling up the efforts to educators should be given in providing high-quality professional learning experience. However, little or no support were given in every school to have effective professional development.

In many nations including member countries of ASEAN, the growing role of higher education and research have been identified in both government policy and scholarly work. Higher Education Institutions (HEIs) are not limited in providing academic support but also in fostering the economic development of nations that extends cultural diversity, political democracy, trade and international cooperation. Philippines is one of the countries in ASEAN region that exert efforts to have direct improvement in Science education for teachers. Studies show that quality of science teachers influence science education of the country (SEI-DOST & UP NISMED, 2011). Amidst the effort given by the government and experts, Philippine schools are facing problems in providing qualified science teachers, inadequate equipment, lack of quality textbook, large classes and many others.

Quality of effective science teachers is essential in improving the quality of science education in the Philippines. Effective science teachers show confidence in the subject matter, pedagogy and positive attitude (Mangali, 2013; Mangali, Torres, Gonzales, & Ganeb,2016). The behavior of science teachers indicates effectiveness in teaching science as well (Mangali, 2013; Harwell, 2003). Behaviors of science teachers can be grouped into three categories namely professional knowledge, professional practice and professional attributes (Khadivi, 2015; Watters, 1994).

According to Marginson (2004) higher education institutions are simultaneously global, national and local. It is nested in national government shaped by patterns of social investment. At the same time cross-border and global dimension activities are growing in relation to knowledge development. Yearly, there are new talented and ambitious migrants who seek education abroad (Inkson, Arthur, Pringle, & Barry, 1997). Like other foreign and international students, Filipinos are attracted to study in Japan because they want to know the culture, free accommodations and other financial benefits. The Japan Information and Culture Center (JICC) and Philippine Association of Japanese Government Scholars (PhilaJames) recently conducted a pre-departure orientation to 38 Filipino graduate students who are recipients of Japan scholarship. There are about 3,000 deserving Filipino

students who were sponsored by the Japanese Government (Mext) scholarship Program since 1954 ("69 Filipino Scholars bound for Japan, The Manila Times", 2016). No matter what the reasons are, Filipino doctoral science student may experience challenges in coping with a new environment.

"Gaman" is a Japanese term which means to endure seemingly unbearable situation with patient and dignity. This term was attributed during the Japanese-Americans World War II and the Tohoku earthquake and tsunami in 2011 (DeMente, 2003). Non-Japanese misperceived the word gaman as a lack of assertiveness or initiative rather than demonstration of strength in the face of suffering or difficulty (Niiya, 1993). Gaman is taught by older Japanese to the younger generation for them to become stronger and mature. Burns (2016) says that older Japanese perceived youth to be gaman when they received help from them without complaint.

Enjoyment happened when a person experienced pleasure caused by concurrent beliefs concerning his/her experience. Pleasure is identified with occurring happiness (Davis, 1982). Hence, a person enjoys, if a person is experiencing pleasure too. In the field of education, students' perception of their instructors' autonomy support, predicted increase interest and enjoyment; and decreases anxiety. This condition allows the students to be grade-focused performance in every semester (Black & Deci, 2000; Deci & Ryan, 1975; Deci & Ryan, 2000). Studies show that high regulatory fit increased participants' enjoyment of perceived success in doing laboratory task (Freitas & Higgins, 2002).

International students enjoyed their stay in other country because they learn new language and culture (Shedivy, 2004). Although foreign students have difficulties in understanding other language, studies confirmed that foreign students have distinct "integrative motivation" in studying in other country. Even if intrinsic factor is a strong predictor of compensatory strategies, integrative motivation promotes active language use (Bonney, Cortina, Smith-Darden, & Fiori, 2008).

According to Duggleby (2000) suffering is a basic social problem of pain. A person who deals with suffering may also go through the basic social process of enduring. Maintaining hope and adjustment are two sub-processes of enduring. A person finds hope when he trusts a higher being and finding meaning in life. A person adjusts when he/she deals with uncertainty; accepting and minimizing the pain. When student engages in cross-cultural living, stress is also inevitable. The suffering related to migration-acculturation stress is one of the reasons that Filipino students need to endure during his/her stay in a foreign country. Migration-acculturation stressors include homesickness, cultural differences, social isolation, academics and unfamiliar climate (Ying, 2005).

The notion of ongoing and life-long professional learning for teachers has been emphasized by several authors including Fullan and Stiegelbauer (Fullan, 1982; Fullan & Stiegelbauer, 1991), Jackson (1974), Johnson (1993; 1996), Schon (1983; 1987), and Stephens, Lovitt, Clarke, and Romberg (1989). Jackson (1974) referred to a "professional growth approach" to professional development, where "the motive for learning more about teaching is not to repair a personal inadequacy as a teacher, but to seek greater fulfillment as a practitioner of the art" (p. 26). Similarly, Schon (1983) emphasized the importance of ongoing, critical reflection in teaching or "reflective practitioners". More recently, Johnson (1996) presented a case for reconceptualizing teacher professional development as "opportunities for learning" to enable it to be "embedded into the ongoing work of the school" (p. 12). Recognition of the need to contextualize teaching and teacher development has led to the advocacy of approaches to professional development (Clarke & Hollingsworth, 2002), as a means to situate the professional development of teachers in realistic contexts. This contextualization of teaching is also found in "authentic" assessment of teaching (Darling-Hammond & Snyder, 2000).

While authors use different terms to describe changing conceptions of teacher change, it appears that fundamental to "new" perspectives on teacher change and teacher professional development are views of "teachers as learners" and "schools as learning communities". Models of the process of teacher change (or growth) have been progressively refined over the last decade or so.

The International College of Economics and Finance (ICEF, 2006) highlighted that there is an increasing number of Filipino students studying outside the country. However, little attention is given on how Filipino doctoral students are reshaped by the "feed-back" of globalization in their respective discipline. The purpose of this phenomenological study is to describe and characterize the enjoying and enduring gaman experience of Filipino doctoral science students in Japan as "Teacher as Learner". The following research questions were addressed in this study: What does "teacher as learner" means to Filipino Doctoral Science Students in Japan? What characterizes "teachers as learners" in Japan?

2. Research Method

2.1 Design

The purpose of this phenomenological study is to explore and describe the lived experience of doctoral science students in Japan as "teachers as learners". This study has phenomenological design with qualitative methods of inquiry (Jackson, 1974; Belinfante & Swihart, 1957). The descriptive phenomenological design guided this study because it intends to understand the essence and essences of phenomena experienced by a group of individuals (de Guzman & Tan, 2007).

The role of researchers in this study necessitates the identification of personal values, assumptions and biases at the outset of the study. One of the researchers was a science teacher and currently taking up Doctor of Philosophy in Science Education at Philippine Normal University. The researcher has been teaching science subjects for thirteen (13) years. The other researcher was a professor at the graduate school of the said university.

Different efforts such as triangulation and focused-group discussions were followed to ensure the objectivity of the study (Krueger, 2009). However, researchers' personal bias may shape the way they view and understand the data collected. The researchers recognized the need to be open to different thoughts and opinions in setting aside his experiences in understanding the responses of the participants.

2.2 Research Sampling

The participants were purposively selected because of their unique expertise in their respective fields (Strauss & Corbin, 1998). The researchers pilot test the questionnaire and unstructured interviewing techniques and open-ended questions regarding the experiences of Filipino Doctoral students in Japan. An e-mail was sent to the prospective participants on their possible participation in the study. Each participant was contacted and provided a convenient location and time for the interview. Prior to the interview, the researcher asked the participants to accomplish a demographic form of relevant background data and to sign a consent form regarding their involvement in the conduct of the study.

Overall, five (5) Filipino doctoral science students in Japan agreed to participate in this study. The participants in the study were science professors in the Philippines who took their PhD in Science Education program in Japan and have stayed in a minimum of three years in the said country. Three (3) out five (5) participants were female (60%) graduate students. There are 2 (40%) participants who specialized in Chemistry and 1(20%) participant in each field (Biology, Earth Science and Physics). In the years of teaching, 3 (60%) participants have been teaching for less than 25 years and 2 (40%) participants have been teaching for more than 25 years already. There are 2 (40%) participants who have stayed in Japan for 4 years, 1(20%) participant stayed in 3, 5 and more than 6 years, respectively. There are four (4) 80% participants currently receiving above Php.50, 000 monthly salaries and only 1(20%) participant received a salary between Php. 40,001-50,000 every month.

2.3 Instrumentation and Data Collection Procedures

The researchers employed qualitative interviewing as the data collection approach. A two-part research

instrument was prepared in this study to gather relevant information. The first part is by getting the baseline data about the participants' information or "robotfoto". The second part is the semi-structured interview guide that serves as the prime source of data. An "aide memoire" was used during the interview to serve as guide to the participants (de Guzman & Tan, 2007).

A protocol consisting of a written permission questionnaire through e-mail and face-to-face interviews were used to obtain the data. Upon the receipt of the confirmation, a follow-up interview was conducted to ask the participants to narrate their lived experience in a detailed manner. The researchers used a non-directive style of interviewing using open-ended questions thereby allowing the participants the freedom to control pacing and draw out clarity on the subject matter being discussed. Additionally, a more directive style of questioning was used as needed when the researchers require more clarification of information that the participants need. The researchers, video and audio recorded the participants' responses, as well as through the prepared hand-written notes (McLafferty, 2004). Probing questions was used to elicit confirmatory answers.

There are various constructive critiques of phenomenological methods of inquiry. In this study, first, the researchers conducted a "field test" on the questions to be used to five (5) participants to assess the type of questions and to ensure that the data from the questions are valid and reliable. Second, nine (9) graduate expert researchers were invited to subject the questions used into content and face validation and compared the responses on the questionnaire with the participant's real opinion which is the result of the field test. Some of the questions were raised several times to assess internal consistency (Creswell & Miller, 2000). Acceptability was determined by asking the participants' and experts' feelings about how they found answering the questionnaire during the validity testing. This process helped identify main issues and formed the basis of the type of questions to be used in the study. The questions used are the following: 1. What do "teachers as learners" in Japan do?; 2.What don't "teachers as learners" in Japan do?; 3. What does a person do who exemplifies the term "teachers as learners"?; 4. How do you describe yourself as "teachers as learners" before you study in Japan?; 5. Does your idea of "teachers as learners" changed after your doctoral degree in Japan?; 6. What previous educational and life experiences influence your decision to study in Japan?; and 7.What characterizes the experience of Filipino Doctoral Science Students in Japan as "Teacher as Learner"?

2.4 Strategies in Analyzing and Validating the Findings

Writing observation memo within the 12-hour period after each interview was the initial step in data analysis. After, the researchers read all participants questionnaires and transcribed the data collected from the interviews to get a general sense of the whole ideas presented. Significant statements and phrases pertaining to their experiences in Japan was extracted from each transcript. Different meanings were constructed from the significant statements. The meanings were organized and categorized into themes, and these themes evolved into theme clusters, and eventually into theme categories. A color coded system was used to highlight specific themes/categories to perform a preliminary analysis (Creswell & Miller, 2000). The researchers wrote a rich and exhaustive description of the experiences of the participants. Essential structure of their experiences were formulated later on. Validation was solicited from the participants to compare the researchers' descriptive results with their experiences. Triangulation from different data sources were used to build a coherent justification for the themes. The descriptions of the themes were presented in the result and discussion section.

Triangulation from different data sources was used to build a coherent justification for the themes. Third party or other researchers check the themes to determine the accuracy of the findings through taking the final report or specific descriptions. The themes formed were returned to the participants to determine its accuracy (Creswell & Tashakkori, 2007; Creswell, 2009). Validity was captured through trustworthiness, authenticity and credibility (Creswell & Miller, 2000). Trustworthiness is determined by credibility, transferability, dependability, and conformability. Credibility was assessed when the researchers' analyses the data through a process of reflecting, shifting, exploring, judging its relevance and meaning and ultimately developing themes and essences that accurately depict the experience. Credibility was also established by asking the participants to check their

transcript for review and verification. Each participant was asked to agree with his or her transcript. Purposeful sampling in this case increased in-depth understanding by selecting rich-information from participants' experiences in Japan.

2.5 Ethical Consideration

In order to maintain the confidentiality of the study, each participant held a meeting, during their free time, to established rapport and trust to the researchers. The meeting was also intended to inform the participants about the nature and purpose of the research, interview plan and schedules, and research protocol. On the same day, the participants were given a letter of consent and were asked to sign the letter if willing to participate in the study. The participants were also reminded that they have the discretion not to answer the questions whenever the questions seemed to be intrusive (de Guzman & Tan, 2007). Participants were also informed when the video and audio recorded was turn on or turn off. These standards were followed all throughout the duration of the interview to all participants. To maintain the anonymity of the participants, real names of the participants were not used in this paper.

3. Results and Discussion

The goal of this study was to provide a window into the lives of Filipino doctoral science students in Japan. The study was design to explore varied experiences of each participant regarding their experiences as teachers as learners. The responses of the participants gave direction and focus to this study that provide an in-depth personal perspective of this phenomenological study. Each participant in this study expressed the importance of studying in Japan as well as their meaningful experience before, during and after their stay in that country.

After a thorough analysis and coding, the Periodic Table of Japan Experience as Teachers as Learners (PeTJET-L) emerged. The periodic table depicts the period on how doctoral science students experienced the enjoying, enduring and gaman stage as they study in Japan. The PeTJET-L also show their learnings as Teachers as Learners. The PeTJET-L showed that the lived experienced of the participants can be grouped into four themes: Enjoying, Enduring, Gaman and Teacher as Learners. As a result of interview, the stages can be grouped based on years of stay. These stages emerge as they describe their experience in multiple interviews.

As shown in figure 1, blocks (B, D, G and A) were use to describe the different stages that doctoral students experienced. The B-block or Before block which is located on the left side of PeTJET-L is consists of different experiences of Filipino doctoral students before the students entered Japan studies up to their two (2) years of stay. The B-block or Enjoying stage represents the experiences that doctoral students enjoyed in Japan. The B-block serves as the first theme of the study.

The D-block or *During block* consists of lived experiences of Filipino doctoral students during their stay in Japan. The D-block describes the second and third year of stay of students in Japan. This block includes the different challenges students faced and endured in Japan. The D-block is the enduring stage and the second theme identified.

The G-block or Gaman block is the stage where doctoral students experienced seemingly unbearable situations in patient and dignity. The Gaman experience happened after students overcome the D block. G-block is essential in the development of Teachers as learners or A-block.

The A-block or After block is located on the right side of PeTJET-L. The A-block consists of the different learnings of doctoral students as Teachers as Learners after their Japan studies. The A-block is the experiences of doctoral students from their third year of stay until they have completed their program. The A-block occurs after the students enjoyed and endured various experiences before and during their stay in Japan. The G and A blocks was the third and fourth themes identified in this study.

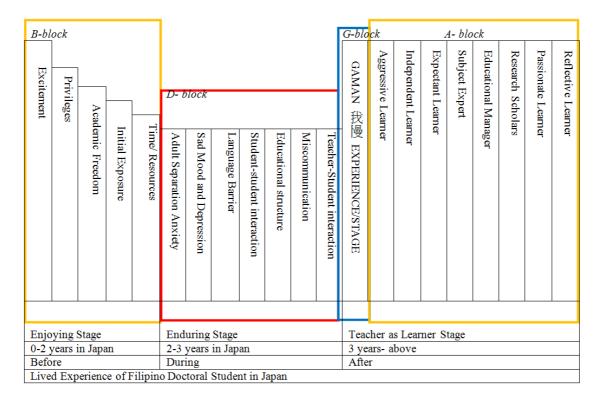


Figure 1. Periodic Table of Japan Experience as Teachers as Learners (PeTJET-L)

3.1 Theme 1: Enjoying Stage

In this study, the enjoying stage refers to the experiences of doctoral science students in Japan that they enjoy and appreciate. The enjoying stage covers the different feelings, emotions and perceptions of doctoral science teachers during the preliminary stage of scholarship application until the first two years of stay in Japan. This stage covers both the physical, emotional and financial aspects that the students appreciate and enjoyed. The enjoying stage was coded according to excitement, privileges, academic freedom, initial exposure and time and resources.

Excitement is positive and pleasant emotions that can improve the performance of student (Cropanzano, James & Konovsky, 1993; Jamieson, Mendes, Blackstock, & Schmader, 2010; Jamieson, Mendes, & Nock, 2013). It has divergent effects which is felt in anticipation of events and are characterized by high arousal. When Filipino doctoral science students prepare their Japan studies, they described it similar to high arousal or excitement. Geoff says "I am excited because it is another chapter of my academic life!"

The social and economic privilege can be difficult to accept for those in the early stages of privilege awareness or racial identity development (Herbes-Sommer, 2003; Tatum, 1992; 1999). Effective engagement may be interfered if there is a social and economic privilege denial (Tatum, 1999; Dunlap, 1998). Some doctoral students describe the enjoying stage as opportunity to enjoy the privileges and opportunities they get when they are in the program.

Jen mentions during the interview that "In my case, it's a big opportunity because I'll be able to live abroad and at the same time, I don't have to spend my own money for my studies"

Tanya agrees that "Technology wise Japan have more instrument and references. I studied a very old taxonomy books. I also have an easy access to university libraries in Europe and America and request them to photocopy some references and send it to me by e-mail".

According to Jen, "If you're a serious student, you can do whatever you want in Japan because they have all the references and books in the library. You can even bring the books and have it borrowed for weeks or months. They have all the laboratory equipment.

Academic freedom and responsibility is significant to fulfill the academy's mission in education and advancing knowledge. Aside from rigorous evaluation by peers and experts, students are engage in the process of fostering the education of students. The importance of living abroad is an opportunity also for the doctoral students to have the liberty in their academic life.

As Zach shares "the structure of education in the Philippines is different from Japan. For instance, I didn't attend any formal class in Japan. I simply visit the laboratory and did something related to my research project.

Lhei mentions "When I go to school, it is my own initiative which is very much different from the structure in the Philippines. In the Philippines you need to attend formal classes and you are closely supervised by your professors.

Geoff shares "The education in Japan was informal, you can come to class any time you want. You can leave the university any time you want. You may not come to university of didn't like. Nobody will tell why are you absent. Why did you come late? If I am expected in the University, then I go to the University. If I'm not expected to go to University. I still go to university because I have some things to finish.

Other doctoral students describe this stage as enjoying because of their initial exposure in Japan. Jen says "It was not my first time in Japan, I've been there three times before I entered the University. The first time I went to Japan is through an exchange researcher program at the geological survey of Japan. That time we had joined three research projects with them. Through trainings, students and workers can be educated about the effective use of technology, ensuring more competent students/workers. It is also an opportunity for personal growth which may improve productivity (Uma, 2015).

Resources can be associated with supply, support and aid that can easily and readily be drawn. In the context of the classroom, resources refer to physical demonstration aids, students' contextual understandings, teacher subject expertise and structured organization of materials, idea and activities (Kurdziolek, 2011). It was also mentioned that participants enjoy their Japan experienced because they have more time to study and have more available resources.

Geoff mentions "In the Philippines, I have limited time to read. When I was in Japan, I had all the time to read. I have no friends to go with. No malls or going to the movies or chatting around. I was all by myself and I have all the time to read. In fact, I missed that time. All I need to do was to download research journals, and read it. I bring the readings at home, so I have learned a lot. It gave me several insights of research projects to do. But when I came back in the Philippines. I had little time because I have to teach, then, at five or 6 o'clock no one is in the university. But when I was in Japan, I can stay up to 1 am or even stayed overnight in the Laboratory without being asked to go home."

3.2 Theme 2: Enduring Stage

The enduring stage refers to the experiences of doctoral science students in Japan that they endure. The enduring stage covers the different feelings, emotions and perceptions of Filipino doctoral students during their stay in Japan. This stage covers both the physical, emotional and financial aspects that the students considered as enduring. The enduring stage was coded based on adult separation anxiety, sad mood and depression, language barrier, student-student relationship, educational structure, miscommunication, and teacher-student relationship.

A wide range of emotions are experienced by students who leave their home and study abroad. Understanding the reasons and purpose why their child will study abroad is essentials to the parents too. Not only the parents experienced emotional stress, students need to be strong in adjusting to the new culture and environment.

Adult separation anxiety is one of the challenges that participants endure during their stay in Japan. Adult separation anxiety disorder has been proposed as a distinct diagnostic category (Manicavasagar & Blasczcynski, 1995; Manicavasagar & Silove, 1997; Manicavasagar, Silove, & Curtis, 1997). Adult separation anxiety disorder are said to only differ from those of juvenile separation anxiety disorder in relation to the developmental changes associated with maturation (Manicavasagar, Silove, & Curtis, 1997).

Jen remembers "I was still single when I applied in Japan. However, I got married before I left the Philippines. That time my husband is also out of the country. He's sailor. After a year he followed me in Japan because we would like to have a kid."

Geoff describes "I communicate with my mother in the morning, lunch and dinner, even in between. I send her SMS everyday. I have to ensure her safety. I need to check her situation every now and then".

Depression is associated to sad mood. Sad mood has been shown to influence the activity of common set of prefrontal and limbic brain regions (Davidson, Pizzagalli, Nitschke, & Putnam, 2002; Mayberg, Liotti, Brannan, McGinnis, Mahurin, & Jerabek, 1999). Sad mood and depression is also implicated in cognitive functions. Depression and sad mood are one of the challenges that participants endure in Japan.

Geoff narrates in teary eye "I was telling my friends and student that my time in Japan is the lowest time of my life (pause for a minute). Because you have to face many challenges, you have to do a lot of struggling for 4 years". Tanya shares "I seldom share work problem at home. I handle everything all by my self."

The same level of sadness was verbalized by Zach "Staying at home is lonelier than staying in the laboratory. In the lab you are pre-occupied with things you do, read and organized. I surf a lot. At home, I didn't do anything (pause). I think you have to face the problem (lonelier), so that you can be comfortable to it. Denying it is something not so good, because it will always come back and it will hunt you for the rest of your stay in Japan". When adult learners become anxious, there is a tendency that he/she will not be able to succeed in a new learning situation, manifesting "negative perception of schooling and value for learning (Learning and Skills Council, 2005).

To become lifelong learners, it is important that adults are engaged in adult education. One of the fundamental aspects is by removing barriers in the organization and the learning process of the institution. Studies show that there are two main barriers to adult learning namely external or situational, and internal or dispositional (Merriam & Caffarella, 1999). Language is one of the external barrier in adult learners too. Language is a means to access systems and learns about services and makes decisions (Woloshin, Bickell, Schwartz, Gany, & Welch, 1995).

Jen verbalizes "In Japan you were suppose to study the language because the medium of instruction is in Japanese".

Lhei says "Most of our references are in English. Before I go to school, I have to read all my assignments and references so that during class, even if they speak in Japanese, which is something foreign to me, I know what they're talking about".

Tanya narrates "You need to know their language. It is for your own survival. I cannot go out of the school and mall because I do not know how to read the signage. During my stay, I study and

learn the basic reading, writing and speaking in Japan. It helped me a lot too. I enjoyed some freebies in malls and even buy things for free because I know how to read, speak and write in Japanese".

Due to language barrier, student-student relationships of doctoral science students are also hindered. Geoff describes "because I cannot speak Japanese, I do not interact with my classmates". Zach shares also that "There was no tension at all because there was no communication at all. I cannot understand them and they hardly communicate in English".

Lhei mentions "They also invited me in parties however, I don't understand them. Communication is a big problem. I'm a bit shy when I joined the party. But I tried. I attended every party they have because I don't want them to give an impression that I don't like them although, it was dreadful in my part. I tried my best to be with them, and to joined them in every occasion and celebration. We have a party at the beginning and end of the term/semester.

Another challenges that Filipino doctoral science students are the different educational structures in Japan. Tanya says "In the Philippines, there are more time on academics but limited time on research while in Japan, all research work and no academic load".

Geoff mentions "The education in Japan was in informal, you can come to class any time you want. You can leave the university any time you want. You may not come to university of didn't like. Nobody will tell why did you come late?"

Lhei concurs "No examination but rather outputs to be submitted. There are also subjects that have no output. The output I am referring pertains to the degree but the specific courses there is none. I was given grades without submitting anything. That is how liberal the education is."

Tanya verbalizes that "The structure of education is different, because for instance, I didn't attend any formal class in Japan. I simply reported to the laboratory and then did something related to my research project. Nobody guided me what to do, nobody told me to do that and this. It is my own initiative which is very much different from the structure in the Philippines".

Zach shares "There is no deadlines for submission. It means you have to set our own deadlines. You have to set your goals; you have to set a time to submit your requirements. In the Philippines, when you submit the materials, it will take a week or two before you received a feedback. The professors in Japanese university are busy. They have to write book, conduct researches, attend conferences, so you don't expect that you will be given feedback right away. You have to set goals, deadlines, even before, the end of the term. You can submit your output in the middle of the semester. It is preferable that if there are some revision to make, you can get the revision to them."

Although Filipino doctoral science students addressed willingness to adapt to new educational setting, participants openly accept that there is a challenge to communicate both to teachers and students, hence, reducing classroom interaction and participation.

There are cases of miscommunication between students and teachers. Geoff describes "At first, I was told that a conference paper can be used for my requirements but only to find out later on that I cannot use it because the requirements is to published in an international journal. When I attended a conference and my paper was also included in the conference proceedings that was also a reviewed and refereed one, I was given false hopes. I have to start from scratch again. I have to re-think of what's going to do, and then I have to think of another research project so that I can be able to comply for the requirements of the degree.

According to Zach "I cannot ask somebody what to do even the school processes/protocol. Of course, I

cannot express fully to my professor, I just do everything by myself. Even the rules in the University, I had a difficulty of knowing it. Even the requirements for the program itself." Teacher-student relationship is a complex and multicomponent systems. The relationship of student-teacher is fundamental by providing teachers knowledge relevant for classroom interaction (Pianta, Hamre, & Allen, 2012). When supports are provided, interactions and engagement increases and learnings are developed. However, when neglected, it decreases learning.

Geoff mentions "Although I was asked to enroll in several classes, it is just for the sake of enrolling it. As for the subject, it is quite interesting because it is about Science, Technology and Society, now should I ask to attend it, I perhaps, happy to attend the class. However, my professor told me not to attend to it and simply accomplished what I intend to do".

3.3 Theme 3: Gaman Stage

Gaman stage refers to the lived experienced of Filipino doctoral students in Japan after facing academic challenges. This stage is based on the descriptions of the participants that happened after they have demonstrated the strength in facing academic difficulty and suffering. Japanese also called this the gaman spirit. Psychoanalytic studies describe this as a sign of maturity and a positive attitude. In this study, gaman is a process on how the participants demonstrated strength during difficult academic life. Participants describe the process on how they have overcome their challenges and become a Gaman.

As Jen shares "You have to tell your professor everything that you do. Even if you want to change the topic or procedures in your experiments. I had a bad experience with my professor. My proposal was on paleobiogeography/paleogeography and I suddenly change to taphonomy. I've been pursuing that topic for more than two years and all of sudden, my professor doesn't want me to pursue that proposal. He sticks to other topic without telling me that he doesn't want to change my original topic."

Geoff says "Nobody will provide me immediate feedback. Being alone in the laboratory, and being the only Filipino in the Laboratory, I cannot ask somebody what to do even the processes. Of course, I cannot express fully to my professor, I just do everything by myself. As a student I learn how to loved my country, this is the only thing you have. Living in a foreign land is not easy, you have to hurdle several challenges academically and in life."

Tanya verbalizes "You should be submissive to your professor. I remember before my graduation; I was able to talk to him freely. He asked me, why are Filipinos always answer back whenever we asked you questions? You should always answer back this way "Hi Sensei, Hi Sensei. "It's more of an honor system."

Zach mentions "the hardship that I've experience in Japan taught me that I have to love all the knowledge and the teachings that I've got from the Japanese. I should also love the culture, education system and structure and how to be a gaman. This is one of the lessons that I've earned. When you study in Japan, you learn how to humble your self, when you compare your self in foreign professors in other university, you are nothing. This is just my observation, many doctoral graduates of Philippine University, see themselves highly sometimes, I can't blame them, perhaps, they just don't know what doctors mean. When I was in the Philippines and realized that, I stopped enrolling my PhD, I felt I have a liability to the degree that means to say, I didn't have enough wisdom, so as if, I am not deserving of the degree yet, because I see a PhD degree holder to be academically wise and have a wisdom, not just an ordinary individual."

Lhei says "You will be lonely, you will be alone, you should not be swayed by strong emotions pertaining to being alone and lonely. Rather, you have to fight for it and make your self busy so

that you will not think that you are all by yourself". She added that "In the Philippines you can request somebody to do the sample preparation for you as well as the photography of the film, in Japan we do everything like we take pictures, develop it, process and analyze it unlike in the Philippines I can request someone to prepare the samples for me".

3.4 Theme 4: Teachers as Learners Stage

The "teachers as learners" stage relate to the learning experiences of doctoral science students in Japan relating to the areas they appreciate as Teachers as Learners. Theme 4 covers the different feelings, emotions and perceptions of doctoral science educators towards the end of their stay and after finishing their PhD degree. It covers both the physical, emotional and financial aspects that the students appreciate and become as Teachers as Learners. This stage was coded according to: 1. aggressive learner; 2. independent learner; 3. expectant learner; 4. subject expert; 5. educational manager; 6. research scholar; 7. passionate learner; and 8. reflective learner.

The participants mentioned that after their experience in Japan, they became aggressive learner. Geoff shares "I've been more aggressive learner after my experience in Japan". I cannot afford not to study and be updated so that you can share new things, new strategy, new technique in conducting research and teaching. You have to be learner itself and you have to read and update yourself as much as possible."

As independent learner, Geoff describes "I simply reported to the laboratory and did something related to my research project. Nobody guided me what to do, nobody told me to do that and this. It is my own initiative which is very much different from the structure in the Philippines".

As expectant learner, Zach describes "After my studies in Japan, I realized that I will be able to learn more in order to teach people or to impart people what I know"

As subject expert, Zach narrates "I am more confident. Because I have learned more about myself. Actually that is the purpose of education, knowing one's capability. The subject that we study, is simply incidental but actually in my opinion, the purpose of educating one's self is knowing one's capability. So after that experience, of course, I became more confident. I came to know what I can be. My strength and my limitation. So if ever, I wasn't able to improve on my limitations. I came to accept it and recognized it. And not being inferior of other people. Having the same strength and limitations.

As educational manager, Geoff shares that "Being a teacher, being a learner knowing how to organize your things, your studies, your materials, your thoughts, help me a lot in writing my research paper".

Zach shares that "You need to read a lot, you need to organize your studies, organize what supposed to be learned, to research on."

As researcher scholar, Geoff shares "I guess so, because everything is about research work. Being a teacher, being a learner knowing how to organize your things, studies, materials and thoughts; help me a lot in writing my research paper".

As reflective learners, Jen says "It requires more time on reflecting on what you are doing, because nobody will provide you immediate feedback".

Lhei shares "In Japan, its nobody's world. It is something like you are all alone. I have experience shopping every weekend, just to cope up with loneliness, or sadness, but when you return back to your apartment, the same level of sadness and loneliness that you will feel. I came to realize that shopping will not give you satisfaction, you are just spending money on things. Merchandise in Japan is so expensive, so what I did then was to save money to buy tickets in

going back to the Philippines. I saved my money and come home to the Philippines three times a year".

Geoff mentions "When I came back, I have realized that I have learned so many things out of readings, out of reflection, self-assessment and communing with nature. Being at peace at your self. Because that is the time that I became at peace to myself. Things that I can do and things that probably I cannot do. I came to know about my limitations. At the same time, I have learned how to improve and strengthen my limitations".

Tanya shares "I was given the highest grade in all subjects that I enrolled. Grades are just grades. You can be proud of it. You can be proud when you see your transcript. Even if your grade is high, you cannot claim that you are proud it. Grades for me is secondary, I didn't give much attention about my grade. What I give much attention was the things I have learned. I think it is so important, if you have learned a lot, it will follow that you will have a good grade. But if you get a good grade, it doesn't necessarily follow that you have learned a lot".

As a passionate learner, Geoff shares "It's part of the culture of the Japanese or probably it's my passion to the craft, to the craft I've learn. I enjoyed working on fossils, working in the field, working in the mountains and to some people".

Jen mentions "As far as my expertise is concern, as paleontologist; stratigraphy of the Philippines is concern, I'm more confident. When it comes to being a new manager, I have to learn more".

4. Conclusion

Japan has supported deserving Filipino doctoral students to be admitted as international students in their country. However, little attention is given to the lived experience of Filipino doctoral students in Japan. This phenomenological study provided a window on how the participants enjoy, endure and become gaman. The study describes how teachers become learners as they exposed to new culture, educational setting and various trainings in Japan. The study showed the essential learnings and experiences of doctoral science students in Japan. Four stages were identified that graduate students may experience in studying in foreign country namely enjoying, enduring, gaman and teacher as learner stage. This study revealed that there are different factors that foreign students may consider in studying abroad namely academic freedom, exposure and resources. Doctoral students are expected to be psychologically and intellectually ready. This research showed that adult learners may experience separation anxiety, depression, and resistance in new educational structure when studied in foreign country even though they are expected to be psychological, emotional and intellectually ready. Studying in Japan resulted a positive impact in the lives of Filipino doctoral students as they become Gaman and learner who are aggressive, independent, expectant, passionate and reflective.

4.1 Implication

The findings provided essential areas that Japan institutions have to review for possible improvement in accommodating foreign students. Like wise, foreign students should be physically, emotionally and academically ready when they leave their home country and study abroad. The study implies that home country and the sponsoring country should work hand-in-hand in serving international students in knowledge building and developing professionals. This research contributes to the literature on how foreign students experienced, as well as the impact of exposure in changing their perspective of students to better serve their home country. Policy makers and education leaders should find ways on how to lessen the challenges that is experienced by foreign students like inclusion of foreign language in graduate studies and international exposure to science educators. In this way, it can reduce the challenges that students experience as they cross-boarders and study abroad. The study can be used in the admission processes before, during and after the academic program of the students. The

study implies orientation and integration of different organizational institutions similar to ASEAN Integration which may result to a more responsive participation of stakeholders in the field of education.

The study implies that doctoral students in each country should be given privileges, enough time and resources to enjoy their stay both in their home country as well as the host country. Education leaders should provide academic freedom to their student to develop teachers as leaners. It is essential to note that varied resources are needed to holistically form doctoral students. The lived experiences of Filipino doctoral science students in Japan molded them to become "gaman" in facing academic difficulty and suffering in life. Moreover, their experiences developed them to become aggressive, independent, expectant, passionate and reflective learner who are subject expert, research scholars and education leaders.

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