Students' perspectives towards poor performance in mid-level health professional's national licensing exams

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Contents

CHAPTER ONE

1. THE PROBLEM AND ITS APPROACH

This chapter deals with the background of the study, a statement of the problem, general objectives, significance, delimitations and limitationsand operational definitions of key terms.

1.1 Background of the study

In our modern era, sustained competitive advantage of a country in general and an organization in particular,relies primarily on trained, skilled and competent human resources. In order to meet the pressing demand for trained and competent manpower, the issue of licensing assessment has paramount importance to promote social, economic, and political development of a nation. In order to create a competent, motivated, and innovative work force the system of occupational competency assessment plays a tremendous role .

In Addis Ababa the occupational competency assessment process has been underway since 2008.The results of the candidates from various occupations have been recorded since then. The recorded evidence shows that among the candidates assessed as a whole, the number of candidates who were found to be competent is very low. Out of 59,746 candidates assessed so far, only 10,163 (17.01%) were found to be competent. Out of 3037 assessed in 2012 only 902 (29.7%) were competent. (Annual Reports to FTVET 2012)

These figures clearly indicate that many candidates fail national licensing examination and it shows how serious the problem is. It is therefore, crucial to know the perspectives of students towards poor performance in the licensing exam.

1.2 Statement of the problem

The grand and ultimate goal of humanity is to produce a competent, skilled, creative and educated society. This helps the modern society to exploit various resources. Primarily, competent and well - skilled manpower will carry forward national development which can in turn enhance the quality of life and provide more opportunities for individuals in that society.

Nowadays, Ethiopia is committed to make great efforts to produce a competent workforce through an occupational competency assessment and certification system which can fulfill the minimum standards listed in the National Occupational Standards. This is because highly competent human resources are now a key phrase at the heart of academicians and development authorities. It is also one of the major concerns of modern society to keep a sustained competitive advantage for a nation that can last much longer. In this effort, the role of stakeholders (assessors, supervisors, assessment centers, training institutions, Center of competency, industries for cooperative training, and other necessary inputs) assumes a central position to cultivate market-oriented competent citizens that can play an incalculable role in materializing the aforementioned national goals.

According to the Ethiopian National TVET strategic document (MOE, 2008) one of the foci of the policy strategy is on producing entrepreneurial and competent citizens that can create their own business and become self-employed both quantitatively and qualitatively.

However,the Addis AbabaOccupational Competency Assessment and Certification Center (OCACC) data base from 2008 – 2011 shows that78,311 candidates were registeredand 59,746 were assessed in 12 occupations. Of the above candidates, only 10,163 (17.01%) were found to be competent during the indicated period.

In Ethiopia, apart from the study undertaken in Addis Ababa Center of Competence the perspectives of students towards poor performance in theNational Licensing examinations have not yet had researchers' attention.

This study tries to seek answers pertinent to the following basic questions:

1) What are the dominant factors associated with formal-training at institutional level affecting candidates' occupational competency?
2) What are the major bottlenecks related to Practical training (cooperative training) that affects the occupational competency of the candidates?
3) What are the main impediments that influence candidates' competency during thenational licensing assessment process?

1.3 Objective of the study

1.3.1 General objectives of the study

In view of theaforementioned statement of the problem, the general objective of this descriptive study is to investigate student's opinion and views towards poor performance in theNational Licensing exam in Addis Ababa.

1.3.1 Specific Objectives of the Study

- To analyze the influence of social, economic and environmental factors affecting the readiness of students taking exams;
- To determine common factors affecting student performance in the exam
- To present recommendations on how to improve student performance in the exam from a students point of view

1.4 Significance of the Study

The main intention of the present study is to explore and assess the students' perspectives towards poor performance in National Licensing

examinations.Therefore, this study is hoping to indicate some solutions to the problems associated with the performance of candidates undergoing occupational competency assessment.

The study is also promising to fill the gaps in knowledge about national licensing examination as well as shed some more light about the dominant factors associated with the performance of candidates undergoing the assessment. More importantly, the findings of this study can also identify new problems for further investigation. Practically, the study is meant to signal and motivate the various stakeholders to take appropriate actions by incorporating the issue in their policies and strategies.

1.5 Delimitations of the study

The study was delimited in terms of geographical area because it is restricted to the City Government of Addis Ababa. Furthermore, the data for this research were gathered from candidates involved in the assessment process using survey questionnaires. To select research participants and representative samples for the study, availability sampling techniques were used. In terms of variables the study is limited to exploring students' perspectives towards poor performance in National Licensing examinations in Addis Ababa City of Administration.

In the present study, candidates' competency on the assessment was treated as the dependent variables. The variables of cooperative training related factors, training institution related factors, delivery system and attitudes of students and the like were treated as independent variables.

1.6 Limitations of the Study

At the heart of any study, it is not uncommon to observe some drawbacks. Likewise, there were certain constraints encountered during the course of this

study. One of the major limitations to this study was that some of the respondents were found to be a bit busy to respond to the survey questionnaires. However the data collectors tried to arrange possible time for the candidates.

Representativeness may also be one of the limitations of the study because it was only candidates from the City government of Addis Ababa who wereconsidered and the sampling was availability sampling.

Moreover, the time extended beyond the initial plan due to lack of resources.The final report was made under intense time constraint which did not leave enough time for analysis.The aforementioned limitations may have minor effect on the findings of the study.

1.7 Operational Definitions for Key Terms

1. **Competency**: the possession and application of knowledge to perform a given task
2. **Cooperative training**- The term used to explain the training in health facilities or practical training in health institutions.
3. **National Licensing exam**: type of exam given to determine whether the candidate has acquired the minimum knowledge, skill and attitude required for a given occupation
4. **FTVET**: Federal Technical Vocational and Education Training agency-responsible for leading diploma level training and assessment under the umbrella of the Ministry of Education:
5. **Qualificationframework**: it is a carrierto determine where a given competency belongs(level 1- level5)
6. **Competent/passedcandidate**: candidates who score the minimum and above requirement of passing
7. **Not competent/ Failed**: candidates who do not score the minimum requirement of passing

8. **Anxiety:** worry and abnormal pressures due to examination related issues/conditions
9. **CoC-** (Centre of competence) organization assigned to conduct National Licensing exam
10. **A-level** teachers- teachers with qualification of master degree
11. **B-level** teachers- teachers with qualification of degree level
12. **C-level** teachers- teachers with qualification of diploma degree

1.8 Organization of the Study

The study was organized into five major chapters. The first chapter deals with the background of the study. The next two chapters deal with a review of the related literature and research design and methodology. Chapter four deals with the analysis and presentation of data. The last chapter is concerned with a summary of the major findings, conclusions drawn, and recommendations of the study.

Chapter Two

Literature review

An examination, commonly known as exam, is a test to see how good somebody is at something. In its widest sense, to examine somebody or something is to look at it very carefully, perhaps to find out why something is not working properly. Someone who is ill may need to go to a doctor to have a medical examination. A machine that is not working properly may need an examination to find out the cause of the problem.

Different studies reveal and define competency in different ways. According to Dobson (2003), competency is defined in terms of what a person is required to do, under what conditions it is to be done and how well it is to be done. Raven and Stephenson (2001) define competency as the ability of an individual to perform a job properly and mannerly. The two authors also maintain that competency is a set of defined behaviors that offer a structured guide enabling the identification, evaluation, and development of the behaviors in individuals.

In his study of a manager's effectiveness, Boyatzis (1982) defines an occupational competency as "an underlying characteristic of a person, in that it may be a motive, trait, aspect of one's self-image, social role, or a body of knowledge which he/she uses, which is casually related to the achievement of effective or better work performances." This may imply that occupational competency encompasses one's drive personalities and addresses the knowledge required for an individual to perform a job successfully.

To McLagan (1997), competency is knowledge and skill, which underlie effective performance. This implies that, instead of maintaining that behaviors underlie competencies, it suggests that competencies underlie behaviors.

Similarly, according to Mirable (1995), and Chung and Lo (2007) competency is viewed as knowledge, skills, abilities, and behaviors required for sound and better performance of job assignments. Blancero, Borosik and Dyer (1996) also define competency as the knowledge, skills, abilities and other attributes needed to accomplish desired future behaviors and activities.

That is, to these authors competency is viewed as the knowledge, skills, capacities and other work related factors which an individual should have when accomplishing a certain task or goal.

On the other hand Klein (1996), sees competency as a collection of observable behaviors that top performers exhibit more consistently than average performers. Klein's view is quite different from the aforementioned explanations and definitions given by other authors. According to him instead of maintaining that competencies underlie behaviors, it suggests that behaviors underlie competencies.

In the same token, Woodruff (1993) views competency as the behaviors driving the competence. This view is similar to Klein's (1996) argument that competencies are not psychological constructs but thematic groups of demonstrated observable and measurable behaviors that must differentiate outstanding from typical performance in a given task. According to the Ethiopian TVET Qualification Frame work (MOE, 2008), competency is explained as:

> *The sum of interrelated abilities, the possession /application of knowledge,abilities, skill, and the ability to combine these elements at any given time. It encompasses the capacity to perform a certain task in wage labor and self-employment according to defined standards, expressed as outcomes, which correspond to relevant work place requirements and other vocational needs.*

The term "competency", in the context of the TVET Qualifications Framework, is further explained as learning outcomes. That is, competency in general and occupational competency in particular is knowledge, skills and abilities which

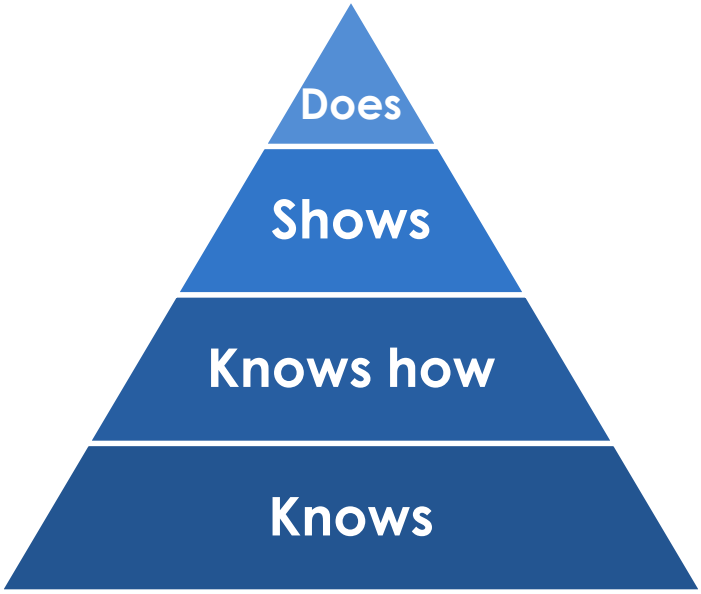
an individual is expected to demonstrate as a result of the learning experiences.

Although the explanations and definitions of competency in general and occupational competency in particular held by the aforementioned scholars are different, they share some common defining elements.

Firstly, most of the definitions assume that competency is a combination of knowledge, skills, and attitudes that underlie effective job performance.

Secondly, the most common emphasized dimensions and could serve as defining elements to the phenomenon of competency definitions are that elements must be observable and/or measurable. That means, competency is a combination of knowledge, skills, and behavior used to improve performance, or as a state of being adequately qualified, having the potential for effectiveness in task performance

In 1990 George Miller, a medical practitioner, provided a simple description of the hierarchies of human performance as a function of growth in understanding. He depicted the hierarchical nature of professional competence as a pyramid of increasing performance proficiency ultimately culminating in the delivery of good-quality health care:



The “Miller’s pyramid of competence” describes each level of performance using a simple verb which clearly defines the advancing level of proficiency that must be achieved by trainees as they increasingly take on the role and responsibility of providing appropriate health care. Although Miller’s pyramid is not traditionally described as taxonomy of performance proficiency, from which professional competence may be inferred, it certainly functions as such, and almost parallels the performance levels described in the SOLO taxonomy. The simplicity of Miller’s pyramid has, however, had an enduring appeal in the medical education literature, and it continues to form the framework of many discussions regarding the assessment of professional competence.

While knowledge is embedded in each level of Miller’s pyramid, the first two levels specifically focus on assessing the knowledge and theoretical constructs that underpin professional tasks; demonstration of the psychomotor and affective skills required to perform the tasks is not required. Levels three and four of the pyramid, however, require trainees to demonstrate proficiency at performing professional tasks. To achieve this outcome, trainees are required to use, in an integrated manner, the specific cognitive, psychomotor and

affective skills appropriate to the task. The concordance between this outcome, and the definition of professional competence provided earlier, is apparent.

The key difference between the upper two levels of Miller's pyramid is the physical location (environment) in which the task is performed – level three tasks take place in a Simulated (in vitro) clinical environment (such as a clinical examination setting), while level four tasks take place in the clinical workplace (in vivo).

An example serves to illustrate the hierarchy of performance assessment using Miller's pyramid of professional competence. The care of patients with hypertension (a professional task) requires that medical practitioners: are knowledgeable about the causes, consequences, clinical features, investigation and treatment of high blood pressure; understand the techniques for measuring blood pressure, examining the heart, eyes and kidneys for signs of hypertension-related target organ damage and the principles of prescribing treatment for hypertension;are able to correctly measure the blood pressure and examine the eyes, heart and urine of a patient with hypertension as well as appropriately manage hypertension; and appropriately manage hypertensive patients encountered in daily clinical practice, including regular examination of their blood pressure, eyes, heart and urine, as well as adjusting their treatment as required. Levels one and two of the pyramid require candidates to demonstrate cognitive proficiency – knowledge and understanding of the causes, consequences, clinical features and management of hypertension, while levels three and four require candidates to demonstrate cognitive, psychomotor and affective proficiency relevant to the care of hypertensive patients.

2.1 Traditional Concept of Assessment

History has shown that, assessment in the past was mainly intended to compare individual's achievement when compared with individuals of similar age and educational background in a specific area of learning. As it is

pointedout in the literature, traditionally, assessment results had been interpreted by comparing them with the average performance of other individuals or test takers of the same group. According to Thorndike (1997), this procedure places each student in relation to other students, which is a kind of norm referenced assessment.

In supporting this view, Gronlund (1995) forwarded that, traditional assessment relies on indirect items that are efficient, substitutes from which we think valid inferences can be made about the individual's performance. These definitions indicate that, in these situations, the mean scores of individuals who have been assessed provide a standard of performance against which the scores of individuals can be compared.

However, individuals need a wide range of competencies in order to face the complex challenges of today's world. Since globalization and modernization are creating an increasingly diverse and interconnected world, individuals need for example to master changing technologies and to make sense of large amounts of available information.

The traditional way of assessment, does not fulfill such need. In support of the need to come up with a different approach of assessment, MacDonald and et.al (1995) as cited in Woldeyes (2011) summarized particular problems of traditional assessment as follows: assessment of students on those matters which it is easy to assess, leading to an over emphasis on memory and lower level skills assessment encouraging students to focus on those topics which are assessed at the expense of those which are not, students giving precedence to graded assessment tasks over those which are ungraded; students adopting undesirable approaches to learning influenced by the nature of assessment tasks; students retraining fundamental misconceptions about key concepts in the subjects they have passed, despite performing well in examinations; successful students seeking cues from teachers to enable them to identify what is important for formal assessment purposes, and consequently ignoring

important but unassessed material. Hence, the authors emphasize requirements that it measures competences, and that it has a beneficial effect on the learning process.

Due to this, it was imperative to make the shift from using traditional forms of assessment to a predetermined standard or criterion based assessment.

2.2 Modern Concept of Assessment

Nowadays, in different sectors of industry, universities,technical and vocational institutions, training centre's and schools, due attention is given to the performance of trainees and employees by applying competency based technical and vocational education and training. A competency based TVET system has been designed to ensure that the needs of different industry sectors are addressed, courses or competency based training programs are developed, and thus, competency based assessments are conducted that can clearly show trainees and/or employees are efficiently trained and are competent as a result. The competency based standards are aimed at reversing the traditional educational model based on inputs (the curriculum) and traditional educational practices which generally attempt to approach academic education.

Out of this concept, competency-based assessment was developed. Unlike traditional assessment, which compares an individual with another individual, competency based assessment, attempts to assess a person's competence against prescribed standards of performance.

In education, an examination is a test to show the knowledge and ability of a student. A student who takes an examination is a candidate. The person who decides how well the student has performed is the examiner. An examination may be a written test, an on-screen test or a practical test.

If the candidate is successful he will have passed the examination. If he is unsuccessful he will have failed. In some cases it is possible for a student who has failed to take the exam again.

When we say a student has passed the exam (National Licensing exam) it means that they have scored the minimum pass mark to be qualified in the area they are taking the exams.For example in National exams/NAC/ for a student to be called passed he/she must fulfill the minimum requirement/mark set for both practical and theoretical parts of the exam.When they are considered failed they scored below the passing mark set for the exam.

A student who passes an examination may get a certificate or diploma. Some certificates are professional qualifications, allowing the person to do a particular job, e.g., doctor, lawyer.

Poor examination results in students in higher education are not usually due to low academic ability, particularly in medical students who have previously attained good "A" grade results (McManus & Richards 1986), but result instead from inappropriate study habits, methods and motivations (Entwistle 1981). Three approaches to study have been identified (Newble&Entwistle 1986): wrfceleurrlirlg emphasizes rote-learning of facts, motivated principally by fear of failure; deep learning stresses understanding of underlying concepts, motivated by interest and a personal need for understanding; and strategic learning selectively applies surface and deep strategies, amongst others, to particular tasks, motivated by a desire for success.

Studies in Pakistan show that medical/health students are continuously challenged by comprehensive curricula and assessments against a backdrop of a highly competitive environment (14). Gupta et al. defined 'academic stress' as a mental distress resulting from apprehension and frustration associated with academic failure, apprehension of such failure, or even an awareness of the possibility of such failure. Dahlin et al. (12) from Sweden quoted the prevalence

of stress to be as high as 12.9% and a suicide attempt rate of up to 2.7% in medical students. A similar study recently conducted in Lahore, Pakistan, stated the prevalence of stress to be as high as 20.8% among medical students and strongly associated with poor academic performance (13). Several other student population-based studies have shown high levels of stress among medical students (14), and some studies have demonstrated high levels of stress in medical students in comparison to undergraduate non-medical students

Other contributing factors like exam anxiety are a set of responses that includes excessive worry, depression, nervousness and irrelevant thinking to a class of stimuli from an individual's experience of assessment/test and outcome. It is experienced by many students while undertaking any exam. There are four main areas of reported stresses which can contribute to exam anxiety including life style issues, lack of required information, studying style and psychological factors.

Life style related issues include inadequate rest, insufficient physical activity, poor nutrition and lack of time management and are found to be the contributing factors leading to exam anxiety as reported by many authors.4,5 Sujit et al6 have reported that lack of strategic studying i.e. ineffective studying style through inconsistent content coverage and studying all night before exams, inefficient studying which include lack of review and revising of course material studied are major factors leading to exam related anxiety.

Psychological factors which contribute significantly to exam anxiety are negative and irrational thinking about exams, outcomes of exams and feelings of no control over the exam situation (e.g. going blank during exam) are reported by many authors.7,8

Some related local studies on “why most occupational competency assessment candidates are found not to be yet competent”. Yitbarek (2011) It is shown in his study, among factors for candidates not to be competent are, inadequate

attention given to cooperative training, inadequate support given to training institutions, variations observed among training tools and assessment tools, lack of adequate information for candidates and unavailability of adequate facilities in assessment centers. These were assumed to be the causes for the candidates to be not yet competent.Other research in Addis Ababa Centreof Competence shows skill performance gaps in nursing occupation candidates were observed.

The Addis Ababa Centre of Competence had also made studies (2012) in dominant factors affecting occupational competency of candidates from stakeholders and they have reached the conclusion that the most common factors negatively affecting occupational competency of candidates were: low quality of the training offered at institutional level, lack of training materials, the ever increasing numbers of trainees, lack of awareness about the unit of competencies being trained, lack of competent trainers; and low motivation of trainees

Other relatively similar type studies showed that different results on students perspectives towards assessment in Addis Ababa COC (I.e. The City Government of Addis Ababa , Ethiopia has established an occupational competency assessment and certification center and it promotes occupational assessment throughout the city in collaboration with the industry through preparation of assessment tool development, training of industry assessors and accrediting the assessment centers and gives occupational competency assessment in various occupations for candidates who graduate from different Technical Vocational Education and Training Colleges and institutes and come from the world of work)(3)

The institute had also carried out research in 2014 on why student had a low score and failed the exam and found the following.Findings of the study revealed that inadequate training was given at institutional level, inability of the trainees to practice in their respective occupations, lack of theoretical and

practical training, were mentioned by assessor respondents with total percentages of 91.3%, 100%, 69.6%, and 87% respectively as factors negatively affecting Occupational Competency of candidates. (3)

Assessors/examiners found that during Occupational Competency Assessment most candidates perform poorly due to inadequate practical training during cooperative training at industries with total agreement percentage and mean value of 18(78.2%) and 3.78 respectively. This implies that inadequate practical training at industries (practical sites) is one of the most hindering factors for candidates which contribute to there being not yet competent in their practical assessment. (3)

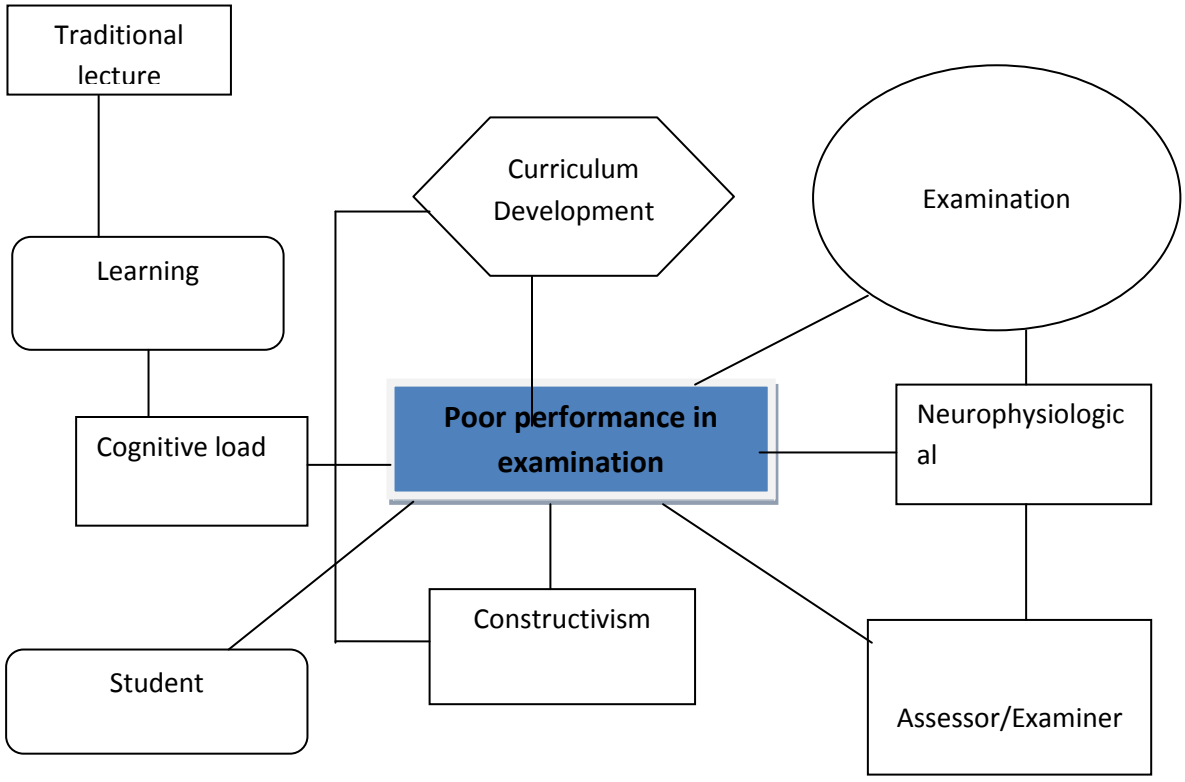
With regard to local studies, there has not been much research done on the issue and very few researchers attempted to investigate some issues of interest about assessment. There are no pure studies of student opinion towards poor performance in the licensing exam.

Thus the current study has been geared towards identifying perspectives of students towards poor performance in theNational Licensing exam/occupational competency assessment

2.1 Conceptual framework

The students' performance in examination may be influenced by various external factors other than their personal characteristics. For example lecture, the learning method, cognitive load, the examiner/assessor, constructivism theories and so on.

The conceptual framework shows the different factors affecting students' performance in national examination.



CHAPTER THREE

3. THE RESEARCH DESIGN AND METHODOLOGY

3.1 The Research Design

The purpose of this study is to explore and assess the perspectives of students towards performance in National Licensing examinations in Addis Ababa. To achieve the objectives of the study a descriptive survey design was employed as an appropriate research method. This was because descriptive research is the act of describing the existing situations in the context.

Here, the method primarily emphasized the collecting, analyzing, and mixing of both quantitative and qualitative data in a single study. Hence, in this study, qualitative data were analyzed and then cross-validated by the quantitative result about the student perspectives towards poor performance in National Licensing examinations gathered by the survey questionnaires. The results of data analysis from the two methods were merged during the discussion phase of this study.

Accordingly, the following techniques and procedures were used to collect and analyze data:

3.2 Sources of Data

The major sources of primary information for the study were candidates.

As secondary sources, policies, government guidelines, directives pertinent to national Occupational Standards, books, journal articles, OCACC Data Base, reports were consulted to better understand and have better insight about the current situation so as to enrich the findings of the study.

3.3 Sample Population and SamplingTechniques

The target population in the study was students involved in formal training at institution level.

During the course of this study, those candidates who took occupational competency assessment for the first time and those who sit to take re-assessment were selected using availability sampling during data collection period (May 2016).

No	Name of Research Participants	Total Population	Sample Size	Sampling Technique employed
1	Candidates	_	100	Availability Sampling

3.4 Data Collection Instruments and Procedures

Both qualitative and quantitative data are required to obtain descriptive information to investigate the issue under consideration. Strengthening this idea, Creswell (2003) forwarded that, using both paradigm approaches in data gathering enables the researcher to expand an understanding from one method to another, to disprove or confirm findings from different data sources. Mainly survey questionnaireswere employed as data gathering tools. Questionnaires were developed and administered to sample candidates. The items in the questionnaires were close-ended and one open ended question was used. The close-ended items were set on a four point-Likert scale measurement which ranges from A representing “strongly agree” and D which represents “strongly disagree”.

The survey questionnaire of candidates and assessors comprises of five parts, of which, part one dealt with personal information and the remaining four

parts comprised items related to attitude, formal training at institutional level, occupation and occupational assessment process.

3.5 Piloting the Instruments

The data gathering tools were revised carefully before undertaking a full scale study to check whether they can generate the expected information or not. In this respect, my research advisor from the University of Toronto wasconsulted as to how the instruments designed for data collection could be improved. Relevant experts workingin the University of Toronto were requested to comment on the prepared survey questionnaires relative to the objectives of the study. Also local friends working on assessment were consulted. Some of them provided important comments on the questionnaires.They added important aspects of competency assessment that has been included in the study. Moreover, they forwarded suggestions for improvement of the interview guide questions.

To this effect, the instruments were distributed to 10friends and University of Toronto staff that were not included in the main study. As a result, most of the items remained with minor modifications in their wording in accordance with relevant inputs obtained from the respondents.

3.6 Methods of Data Analysis

Data collected via survey questionnaires were analyzed quantitatively. Regarding the data that were collected via open-ended questions, decision rules were established to classify the items in terms of their relative strength of responses. The average value was obtained by dividing the sum of the means with a total number of means. Accordingly, the average value is 2.00. Based on the average value the result was interpreted as follows: if the score is less than 2.00, it is below the average of agreement/disagreement and if the score is greater than 2.00, the agreement/disagreement is above the average. More specifically, if the mean is between 1.00-1.49, 1.50-1.99, 2.00-2.49 and 2.5-

3.00 and above it washypothesized to represent that majority of the respondents rated a given item as Strongly agree, Agree,Disagree, and Strongly Disagree respectively depending on the nature of the item.

CHAPTER FOUR

ANALYSIS AND INTERPRETATIONS OF DATA

Under this section the data collected via various data gathering instruments are analyzed and presented. The analysis is based on the data collected through survey questionnaires.A total of 110 copies of the survey questionnaires were distributed to private and government candidates.

Out of the distributed questionnaires, 98 (89.09%) were filled in and returned and 12 of them were incomplete and discarded from the analysis. Quantitative data obtained through closed-ended items are summarized and presented in tables and quantitatively analyzed.

To substantiate the responses obtained via close-ended items data gathered through open–ended items were categorized and qualitatively described based on the questions posed at the study.
Based on the collected data analysis, interpretation, and discussion of the results are presented under the following major headings as follows:

4.1 General Characteristics of the Participants of the Study

The major characteristics of samples involved in responding to the survey questionnaires have been summarized and presented in Tables 1 and 2

TABLE 1: BACKGROUND INFORMATION OF RESPONDENTS

No	Characteristics	Candidates	
1	Sex	No	%
	Male	38	39.6
	Female	58	60.4
	Missing	2	
	Total	98	
2	Occupation (field of study)	No	%
	Nursing	43	43.9
	Radiography	6	6.1
	Laboratory	18	18.4
	Pharmacy	24	24.5
	Health information technician	7	7.1
	Total	98	100
3	Institution graduated	No	%
	Private	78	79.6
	Public	20	20.4
	Total	98	100
4	Occupational Competency Status	No	%
	Assessed 1st time	36	37.1
	Assessed 2nd time	61	62.9
	Total	97 (missing 1)	100

A total of 98candidates were used for the survey.

About the proportion of male and female participants of the survey.The proportion of female participants (59.2%) who took part in the study,was greater than that of the male participants (38.8%).

Regarding the field of study(occupation the participants engaged with) Nursing ,Pharmacy, Medical laboratory, Health information technology and Radiography respondents took 43.9%, 24.5%, 18.4%, 7.1% and 6.1% respectively

Concerning the institution where the students had trained the majority of the candidates (79.6%) were from private institutions while the remaining 20.4% were from public institutions. This shows the private sector is highly engaged in providing training.

Most of the candidates (62.2%) who took part in the study had taken occupational competency assessment at least once before. As a result most of the participants have prior experiences about occupational competency assessment which may enable them to offer adequate information on the issue under consideration.Incorporating 36.7% candidates who took assessment for the first time also helps to know their feelings and concerns regarding the issue raised.

4.2 The Attitudes of Candidates towards National Licensing examination

Here, the main intention was to assess the attitudes of candidates towards the national examination and their feeling about the issues under consideration. To this end, the results are analyzed andinterpreted as follows:

Table 2: Responses on the attitudes of candidates towards National Licensing Exam

No	Items	Responses								TAP	Mean	SD
		SA		A		D		SDA				
		F	%	F	%	F	%	F	%			
1	National Licensing exam is useful for career development	27	27.6	61	62.2	8	8.2	1	1.0	89.8	1.823	0.613
2	National Licensing exam is personally important for employment opportunity	36	36.7	45	45.9	12	12.2	5	5.1	82.6	1.857	0.825
3	I believe National Licensing exam will enable me to know my skill and knowledge gaps	21	21.4	54	55.1	17	17.3	5	5.1	76.5	2.062	0.775
4	National Licensing exam builds one's self – confidence	31	31.6	54	55.1	9	9.2	4	4.1	86.7	1.857	0.746
5	National Licensing exam is useful for professionals to be competent in the real workplace	37	37.8	43	43.9	12	12.2	6	6.1	81.7	1.867	0.857
6	I am psychologically ready to take the assessment at any time if I am not able to become competent in this first assessment	21	21.4	56	57.1	17	17.3	2	2.0	78.5	2.388	2.787
7	National Licensing exam System is a hindrance for further education (university and other..)	24	24.5	52	53.1	15	15.3	7	7.1	77.6	2.051	0.829
8	I like the occupation which I am currently engaged in.	13	13.3	55	56.1	24	24.5	5	5.1	69.4	2.306	1.153
9	I was placed in the current occupation by the institute based on my interest.	26	26.5	58	59.2	11	11.2	3	3.1	85.7	1.908	0.784

Note: SA= Strongly Agree; A= Agree; D= Disagree; SDA= Strongly Disagree SD= Standard Deviation, TAP= Total Agreement Percentage; and F=Frequency

It is evident from Table 2, that the majority of candidate respondents reported that the Occupational National Licensing examination is useful for career development, National Licensing examination is important for employment opportunity, National Licensing exam builds one's self–confidence, National Licensing exam is useful for professionals to be competent in the workplace and placed in the current occupation by the institute based on my interest. with (TAP= 89.8%, mean= 1.82), (TAP= 82.6%, mean =1.85);(TAP= 86.7%, mean =1.86);(TAP= 81.7%, mean =1.87); and (TAP= 85.7%, mean = 1.91) respectively.

The table also indicates that the mean scores of the candidate respondents about the importance of National Licensing exam for career development, National Licensing exam to build one's self–confidence, and placement in the current occupation based on interest were below the scale mean (mean=2.00), which may reveal that the majority of the candidate respondents rated the items between strongly agree and agree inclusively. This may imply that majority of candidate respondents had positive attitudes towards the aforementioned issues.

Another observation from Table 2 shows that candidate respondents tended to assign the lowest two ratings to: National Licensing assessment helps candidates to recognize skill and knowledge gaps and the attitudes about the occupation currently they are engaged inwith total agreement percentages and mean values of 76.5% and 2.15 and 69.4% and 2.31respectively of disagreement on the items relative to the scores in other items of the survey..

Most (78.5%) confidently say that they are psychologically ready to take the assessment any time if they are not competent on the first assessment.It implies that the majority of the psychological disturbances are happening during the first exposure to National Licensing examinations, while 22.4% have difficulty for psychological readiness to take the examination if they are not competent at the first examination.

A final note from the above table, is that on one hand, the Occupational Competency Assessment system is a bottleneck for candidates to join

university for further education (item 8).This was ranked 3rd among the lowest four ratings by considering the total agreement percentage (77.4%). Regardless of the total agreement percentage, the majority of the candidate respondents 76(77.6%) with mean score (mean= 2.051) found that the Occupational Competency Assessment system is a bottleneck for candidates to join university for further education. The majority of the candidate respondents rated the item as strongly agree.

Moreover, candidate respondents reported that: occupational competency is useful for career development and occupational competency assessment builds one's self confidence with percentages of 88(89.8%) and 85(86.7%) as the 1stand 2ndhighest ratings respectively.

The qualitative data on comments and general suggestions reflects that national assessment is good for education system improvements and advised to be conducted in strengthened manner.

Table 3 Responses of candidates on items related with formal training at institutional level

Nº	ITEMS	RESPONSES								TOTAL		MEAN	
		SA		A		D		SD		SA	A	Mean	SD
		F	%	F	%	F	%	F	%	SA+A	D+SD		
1	The formal training equipped me with the basic theoretical knowledge to successfully complete National Licensing examination	29	29.6	50	51.6	15	15.3	4	4.1	81.2	19.4	1.939	0.784
2	The formal training equipped me with the basic practical knowledge to successfully complete National Licensing examination	34	34.7	49	50	13	13.3	2	2.1	84.7	15.4	1.827	0.733
3	The trainers' had skill in teaching practical part of the lesson	24	24.5	58	59.2	13	13.3	3	3.1	83.7	16.4	1.949	0.709
4	The trainer during formal training had adequate theoretical knowledge within their field	19	19.4	64	65.3	13	13.3	2	2.0	84.3	15.3	1.978	0.642

Note: SA= Strongly Agree; A= Agree; D= Disagree; SDA= Strongly Disagree
S= Standard Deviation, SA+A= Strongly Agree & Agree; D+SDA=Disagree & Strongly Disagree; and F= Frequency

19.4% of candidate respondents have shown a tendency of disagreement and strong disagreement on the 1stitem (i.e., the formal training equipped me with the basic theoretical knowledge to successfully complete theNational Licensing examination). This indicates that inadequacy in training materials and the time given for theoretical sessions was low. Similarly 15.4% were complaining about The formal training equipped me with the basic practical knowledge to successfully complete theNational Licensing examination.This suggests that the supplies of learning materials, lack of proper exposure to cases, difference in materials used during training and assessment can be mentioned as one of the factors negatively affecting the occupational competency of the candidates'. This might be explained by the fact that the institutions and the practical sites as well as the center of competences are required to work in collaboration so as to bring the desired outcome.

Similarly, regarding the 3rd item (i.e., the trainers' had skill in teaching practical part of the lesson) 16.4% of the candidate respondents viewed as strongly disagree and disagree on the issue.

This again indicates that the trainers are not qualified enough in providing practical sessions of the course in contrary some of the students do not easily understand the applied/applicationpart of the course and it means there needs extra help and effortto make students easily understand (onboard) during practical sessions. The majority of the candidates with total agreement percentageof 83.7% in support of the trainer had good practical teaching skill.

Regarding the trainer had adequate theoretical knowledge within their fieldduring formal training had most of the respondents positively agree (84.3%) while 15.3% (disagree +strongly disagree) with the trainers do have adequate theoretical knowledge within their field of study.This may possibly be as per the principle of the TVET learning system which says 30/70 rule(only 30% of the training should be theoretical and 70% encompasses the practical scenario).Additionally some of the instructors might be incompetent in class

lectures.In reverse, the lectures are not very simple as to the level of the trainees since they are mid-level professionals in need of simplification.

Generally speaking candidate respondents viewed the formal training to be good in terms of equipping candidates with the basic theoretical knowledge. Practical knowledge for theNational Licensing exam and the trainer's practical teaching skill and theoretical teaching skill is fair enough within their field of study. This is supported by the mean score of the response of candidates to the aforementioned three items. Thus, the mean score of the first, the second, third and the fourth item were found to be 1.94, 1.83; 1.95 and 1.98 respectively.

To conclude, inadequacy of supplies of learning materials that are similar to the ones used during national licensing assessment, poor exposure to cases, effectively teaching students, imbalance between practical and theoretical sessions were found to be problems associated with formal training implementation affecting theNational Licensing exam of candidates

Qualitative data from comments and suggestions reflects that there is lack of adequate equipment for practice , some of the trainers do not have skill to train the practical part of the lesson, the formal training don't build self-confidence of trainees and some of the trainers are not motivated and the practical training in facilities is inadequate as some replied.

Table 4 Candidate's responses on major weakness during national licensing assessment

NO	ITEMS	RESPONSES								TOTAL		MEAN	SD
		SA		A		D		SDA					
		F	%	F	%	F	%	F	%	SA+A	D+SDA		
1	During national licensing examination the assessor properly explained the purpose of the assessment to the candidates	24	24.5	61	62.2	12	12.2	1	1.0	86.7	13.2	1.898	0.634
2	The overall environment of the assessment center was suitable for the assessment.	24	24.5	46	46.9	24	24.5	3	3.1	71.4	27.5	2.062	0.788
3	The time allocated for the assessment was enough and has taken the difficulty level of the practical exams.	16	16.3	57	58.2	21	21.4	4	4.1	74.5	25.5	2.133	0.727
4	Equipment's supplied during occupational competency assessment were adequate..	17	17.3	52	53.1	24	24.5	5	5.1	68.7	29.6	2.174	0.774
5	The assessor was consistent in decision making during national licensing assessment.	20	20.4	52	53.1	24	24.5	2	2.0	73.5	26.5	2.082	0.728
6	The language used in the assessment tool / project was clear and understandable.	22	22.4	64	65.3	10	10.2	1	1.0	87.7	11.2	1.897	0.604
7	The instruction used in the assessment tool (Projects) was clear and understandable.	28	28.6	54	55.1	14	14.3	2	2.0	83.7	16.3	1.898	0.711
8	The questions found in the national licensing exam are relevant	17	17.3	57	58.2	21	21.4	3	3.1	75.5	24.5	2.102	0.711
9	The questions in the national	18	18.4	57	58.2	21	21.4	2	2.0	76.6	22.4	2.072	0.693

	licensing exam are qualified enough to be administered as the nationals assessment package												
10	The breadth and depth of knowledge in the questions are expected of nationals licensing exam	24	24.5	55	56.1	15	15.3	4	4.1	80.6	19.1	1.989	0.753

Note: SA= Strongly Agree; A= Agree; D= Disagree; SDA= Strongly Disagree

S= Standard Deviation, SA+A= Strongly Agree & Agree; D+SDA=Disagree & Strongly Disagree; and F= Frequency

As has been shown in Table 13, candidate respondents rated the 1st item (i.e.), in the national licensing examination the assessor properly explained the purpose of the assessment to the candidates, with a total of 86.7% agreed the explanation of the assessor on the importance of the assessments.

In line with this 27.5% of the candidates are not comfortable in the overall environment of assessment. This clearly shows that the overall environment of the assessment center is not suitable for the assessment. The set-up and preparation, the orientation, interaction with assessors and supervisors, time of the examination may affect students' performance during examination.

Fair time allotment for the examination is also very important to take the examination. The 3rd point with a 25.5% negative response explaining the time allocated for the assessment was not enough and has not taken the difficulty level of the practical exams into account. It may be that when the examination was developed there was no studied time allocation, the difficulty level of each item is not properly calculated and carried out systematically, inadequacy of time allocated for the projects, variation among assessment tools and occupational standards, organization of assessment workshops not based on occupational standards and presence of assessors who were not competent could be possible hindering factors for candidates during assessment.While 74.5 % of the respondent candidates are comfortable with the time allotted for practical examination.

Similarly, in responding to an item that refers to whether the equipment supplied during assessment was adequate, 29.6% of the respondents disagreed. This indicated that more than a quarter of the total candidates have the tendency to believe that they were assessed where there were no adequate equipment and hence, they were not yet competent. This might happen due to lack of regular checkup made on behalf of the center of competences (COC) center, local and international experts, failure of assessors to visit the adequacy and readiness of assessment equipment in assessment centers prior to the

assessment, failure of the center of competences (COC) center to make the required payment on time for assessment centers to purchase assessment equipment and loose relationship among the COC center and assessment centers can affect students' performance in examinations.

Assessors were fair in decision making during assessment, with total agreement and disagreement percentages of 73.5% and 26.5% respectively. This indicates that significant number of candidate respondents tended to show that assessors were inconsistent in decision making during assessment.

This might also imply that, during assessment assessors did not show adequate sense of professionalism, failed to give constructive feedback, did not clearly explain the units of competency candidates were expected to demonstrate, failed to base their decision on the critical aspects of the project and unable to create a suitable assessment environment through orientation.

Regarding the language used during assessment 87.7% of the respondents replied positively, meaning the candidates know what to do, how to do and expectations of the projects (practical scenario), so that the language used in the assessment tool / project was clear and understandable. While 11.2% disagree that the language used in the assessment is not self-explanatory and needs assistance from a second person.

Regarding the instruction used in the national examination of the projects 83.7% of the candidates showed tendency of agreement that the project titles, the tasks under each project and related questions are understandable when performing the projects. 16.3% of the respondents negatively react to the instruction clarity of the projects.This may be that the projects are too long to understand, the tasks under each project are not related, and use of jargon words.Purposely twisting the phrases can be identified as one of the major impediments.

A quarter of the respondents showed a tendency of disagreement on the 8th item i.e (The questions found in the national licensing exam are relevant). Hence this might indicate certain questions in the national licensing examinations do not really test their skill, knowledge and attitude.They mainly focus on recall type questions and some of the questions might not check analytical thinking. Similarly in the status of questions to be delivered as national assessment packets, 22.4 % of the respondents disagree that the questions in the national licensing exam are qualified enough to be administered as national assessment package this is may be some of the questions are straightforward. Only multiple choice and matching type questions are present, lack of proper editorial may be there. Correspondingly, on the breadth and depth of knowledge of the questions in the national licensing exam 19.15% of the candidates responded negatively, the critical aspects of each competence are not well addressed, the underpinning knowledge, skill and attitudes are not addressed properly could be the weakness.

While the questions found in the national licensing exam are relevant, The questions in the national licensing exam are qualified enough to be administered as the nationals assessment packageand The breadth and depth of knowledge in the questions are expected of nationals licensing exampositively replied by candidates as 75.5%(mean=2.102), 76.6%(mean=2.072), and 80.6%(mean=1.989) respectively.

The qualitative data analysis from comments/general suggestions shows that the examination is very difficult, the time allocated for the national assessment is not enough, the training in school and the test in national examination is not similar, we are stressed and feel worried about the exam because if we fail the exam we cannot get work and continue education, the assessors are not consistent in decision making and one of the candidates replied as followed

*“national assessment is not fair and the assessors are not confidential*ሌላው knowledge ከወደቅን practice ብናልፍምዋጋየሌለውለምንድንነውአናሳዝንምእባካችሁእዘኑልን”

Its tells us the assessors are not fair and confidential and they asked to consider their efforts in either of the examination results (theory or practice).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This particular section presents a summary of the major findings, conclusions and recommendations of the study which is hoped to redress the problems raised in the study.

5.1 Summary

The main purpose of the study is to determine the perspectives of students towards poor performance in national licensing examinations with special emphasis to the attitudes of candidates towards national licensing examination and certification system and major factors affecting candidates' occupational competency during formal training at institutional level and during national examinations.

Moreover, this study investigated candidates' perspectives on the major impediments that could negatively affect the competency of candidates during the national licensing examination process was found to be among the central focus of the study. On top of this,this study identified some of the most common factors responsible for candidates to be not yet competent in the national licensing examination with an intention of forwarding some concrete and viable solutions which would have paramount importance to alleviate the problems were also the objective of the study.

5.1.1 Attitudes of Candidates towards national licensing examination

- Candidate respondents pointed out: the usefulness of National Licensing examination for career development, National licensing examination builds one's self-confidence,National licensing examinations' importance for employment opportunity, the usefulness of National licensing examination for candidates to be competent in the workplaceand interest in current occupation had the highest ratings with total agreement percentages and mean scores in their order 89.8% and 1.823, 86.7% and 1.857,81.7% and 1.865 and 85.7% and 1.908 respectively. They also found that national licensing examination helps students to recognize skill and knowledge gap which accounts 76.5% and their attitudes in psychological readiness is to take the assessment once not competent ranges to 78.5%.

- The majority ofthe candidate respondents 76 (77.6%) with mean score (mean=2.051) viewed that national licensing exam is a bottleneck/hindrance for candidates to join university for further education by rating the issue under discussion as strongly agree. and more than a quarter(29.6%) candidate respondents do not like the occupation they are engaged in which is a paradox with 85.7% replying that they were in current occupation based on interest. This is may be due to few alternatives in the institutions.

- As the whole, the respondents show positive attitudes towards theNationalLicensing examination, it shows higher amount of overall positive attitudes. So that there is great improvement in attitudes of

candidates which was less than 50% in studies conducted by Addis Ababa Center of Competence before.

5.1.2 Factors Associated with Formal Training at Institutional Level

- The finding of the study revealed that the respondents reported that formal training equipped them with basic theoretical knowledge to successfully complete theNational licensing examination.The formal training helps to acquire skills to pass theNational exam.The trainers teaching skill for practical sessions and trainers adequate knowledge within their field were responded by 81.2%, 84.7%, 83.7 and 84.3% with positive responses
- Furthermore, summary of the analysis obtained from the qualitative data illustrates that absence of sound continuous assessment during practical attachments, training and at institutional level, frequent change of training program during formal training, shortage of training materials, and low motivation of the trainees and the trainers, were found to be among the factors negatively affecting occupational competency of candidates.

5.1.3. Major Impediments for Candidates during National Licensing assessment.

- Candidate respondents found thatthe overall environment of the assessment is not suitable, time allocated is not enough, equipment supplied during national assessment were not adequate and the assessor was inconsistent in decision making during the national examination with total percentages and mean scores of (27.5, mean= 2.062), (25.5, mean= 2.133), (29.6, mean= 2.174), and (26.5, mean= 2.082) respectively. On the contrary, a majority of the candidate

respondents reported that the assessor properly explained purpose of the assessment, the language used in the assessment was clear/understandable, the instructions used were clear and the breadth and depth of knowledge in the questions are expected of a National examination with total percentages and mean scores of 86.7% and 1.898, 87.7% and 1.897, 83.7% and 1.898 and 80.6% and 1.989 respectively.

- The study finding indicated that the assessment package is sub-standard (low quality)to be administered as national assessment package and it affects candidate'sperformance in National licensing examinations.

5.1.5. Factors perceived to lead to poor exam performance

- The study revealed that the most common underlying factors for candidates to be not yet competent were: candidates' feeling of anxiety during the assessment, inconsistency between the assessment tool and training, weakness of the formal training at institutional level and candidates' lack of preparation to take the assessment with percentages of 61.4%, 53.3%, and 52.6% and 52.6% respectively.

5.2 CONCLUSIONS

On the basis of the major findings, the following conclusions are drawn:

The current overall level of candidates' attitudes towards National licensing examination is not as expected meaning its positive.

However the minimalnegative attitudes of the candidates may exert a notable and powerful negative influence and burden on the performance of the candidates during national licensing assessment.

Moreover, the study revealed that the National licensing examination is a bottleneck/hindrance to candidates to join university for further education. This may tend to reduce candidates' enthusiasm and motivation to internalize the aims, advantages and central concern of the National licensing examination which may in turn jeopardize the performances of the candidates in examinations.

1. The study revealed that stakeholders attributed much more regard to lack of supplies of training materials, poor organization of workshops, lack of competent trainers, low motivation of trainees and trainers, and poor collaboration between health facilities for practical training and training institutions as the major factors associated with formal training at institutional level affecting negatively the performance of candidates during examination. Therefore, trainees do not get appropriate and practical training during health facility training, which in turn may have a significant negative impact on the development of trainees' competencies. Pragmatic

2. The major impediments that influence candidates' competency during theNational licensing assessment process were: assessors

inconsistency in decision making during assessment, aggressiveness of assessors during assessment, inadequate supplies during assessment, the improper time allocation and the overall environment of the assessment is not conducive,

3. The other underlying factors for candidates to be not yet competent in their order of severity were: candidates' feeling of anxiety during the assessment, inconsistency between assessment tool and training, weakness of the formal training delivery system at the training institutions, and inconsistency of assessors in decision making.

5.3 RECOMMENDATIONS

Based on the major findings and conclusions of the study the following recommendations are forwarded:-

1. The overall level of candidates' attitudes towards theNational licensing examination is found to be not as expected. Many respondents show positive attitude towards national licensing examinations while major stakeholders should undoubtedly arrange sound awareness creation programs (programs that tells what assessment mean, its objective and students role in assessment) so as to scale up the positive attitudes of the candidates towards the system.
2. The study revealed that there is lack of supplies and equipment during assessment. It is therefore, recommended that the center of competence should closely follow assessment centers, allocates enough budgets for materials and supplies fulfillment and should work in making the assessment environment conducive(which needs further investigation) to the candidates by benchmarking other countries and through further studies.

3. The findings of the study exposed that there may be inconsistency in decision making among assessors , so its highly recommended to provide different capacity building training and introducing two or more assessors per assessment is important and additionally assignment and recruitment of assessors should be done with great care
4. The study also revealed that the time allocated for the practical part of the national assessment and quality of the assessment packages is not good. Therefore its' important to think of designing the exam

package with senior experts and introduce a technical exam reviewing boardin order to have standard assessment tools.

5. The finding of the study showed that one of the major responsible factors for majority of the candidates not to be yet competent is the weakness of formal training delivery system at institutions. It is therefore, recommended that the educational bureaus and ministry of education should systematically set standards and work towards the execution of those standards.
6. It was found that candidates experience anxiety during examination; therefore, the institution should give adequate and relevant orientation, information and feedback prior to and at the end of every assessment session in school and during national licensing exam.
7. Finally proper monitoring and evaluation mechanisms should be strengthened at all levels who involved in working assessment related matters and public dialogues should be carried out so as to on board all stakeholders in the same page and I also advise there need to be career counseling and life skill training for trainees that would enable them to have vision in their life and interest in their occupation.

Thank you!

Annex

Questionnaires

Name (optional)_____ Sex_____ Age_____

Institution graduated (private/public) _____ Date of Assessment_____

1. National licensing exam is useful for carrier development
   A) Agree B) partially agree C) Disagree D) No idea
2. National licensing exam is personally important for employment opportunity
   A) Agree B) partially agree C) Disagree D) No idea
3. I believe National licensing exam will enable to know my skill and knowledge gaps
   A) Agree B) partially agree C) Disagree D) No idea
4. National licensing exam is useful so as to get licensing Certificate
   A) Agree B) partially agree C) Disagree D) No idea
5. National licensing exam builds one's self – confidence
   A) Agree B) partially agree C) Disagree D) No idea
6. National licensing exam is useful for professionals to be competent in the real workplace
   A) Agree B) partially agree C) Disagree D) No idea
7. I am psychologically ready to take the assessment any time if I am not able to become competent in this first assessment
   A) Agree B) partially agree C) Disagree D) No idea
8. National licensing exam is a means of collecting money from the candidates
   A) Agree B) partially agree C) Disagree D) No idea
9. National licensing exam System is a hindrance for further education (university and other..)
   A) Agree B) partially agree C) Disagree D) No idea
10. I am proud of the occupation which I am currently engaged in.
    A) Agree B) partially agree C) Disagree D) No idea
11. I was placed in the current occupation by the institute based on my interest.
    A) Agree B) partially agree C) Disagree D) No idea
12. The formal training was successful in terms of equipping me with the basic theoretical knowledge.
    A) Agree B) partially agree C) Disagree D) No idea
13. The formal training was successful in terms of equipping me with the basic practical skills.
    A) Agree B) partially agree C) Disagree D) No idea

14. The formal training focused on practical skills than theoretical knowledge.
    A) Agree B) partially agree C) Disagree D) No idea
15. In my opinion, the trainers during formal training had adequate practical skills.
    A) Agree B) partially agree C) Disagree D) No idea
16. In my opinion, the trainers during formal training had adequate theoretical knowledge.
    A) Agree B) partially agree C) Disagree D) No idea
17. During national licensing examination the assessor properly explained the purpose of the assessment to the candidates
    A) Agree B) partially agree C) Disagree D) No idea
18. The overall environment of the assessment center was suitable for the assessment.
    A) Agree B) partially agree C) Disagree D) No idea
19. The time allocated for the assessment was enough and has taken the difficulty level of the practical exams.
    A) Agree B) partially agree C) Disagree D) No idea
20. Equipments supplied during occupational competency assessment were adequate.
    A) Agree B) partially agree C) Disagree D) No idea
21. The equipments supplied by the assessment center for the assessment were similar with the equipments supplied by the institutions during the formal training
    A) Agree B) partially agree C) Disagree D) No idea
22. The assessor was consistent in decision making during the assessment.
    A) Agree B) partially agree C) Disagree D) No idea
23. The language used in the assessment tool / project was clear and understandable.
    A) Agree B) partially agree C) Disagree D) No idea
24. The instruction used in the assessment tool (Projects) was clear and understandable.
    A) Agree B) partially agree C) Disagree D) No idea

General comment/suggestions

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