

VALIDATING PERFORMANCE OF CENTRE OVER CUSTOMER SATISFACTION IN SOCIAL LEARNING CENTRE

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ABSTRACT

This study will triangulate and validate between the determinant factors towards performance of social learning centre with main theme towards customer satisfaction of social learning centre. In stratified simple random method, groups of strata selected and group from stratified purposeful method, has drawn two (2) major groups. The result of performance from determinant factors and the result of customer satisfaction from major theme from factors would be verified and validated. Both result from performance data would be verified and validated with data customer satisfaction of u3e, PAWE and private day care within areas of Klang Valley and Selangor. There are 150 operators of quantitative method and 10 participants and 2 centers of qualitative method involved in questionnaires, interviews and observation. The credibility shown in tools and period of data collection where questionnaires over mail and online is on-going process interviews begin from October 2019 until end of December 2019 (bin Ali, Performance, 2020) and period of interview begins from January 2020 until end of January 2020 and observation from October 2019 until end of December 2019. The main theme interviews of customer satisfaction were personalized in services and observation requires personal attention and personal interaction between instructor and participant. This article will validate performance and customer satisfaction of quantitative and qualitative data in the same study within two (2) methods. Towards attaining data validation needed in the analysis within single paradigm; and further extending the analysis between the two different paradigms for completeness purposes. (Sabina Yeasmin, 2012) A further elaboration will be done specifically in customer expectation on effectiveness of management and efficiencies of management organization. The strength of each methodologies or sampling will reinstate weaknesses the others methodologies. The advantages and disadvantages of two (2) mode of online and face to face learning method of learning identify the strength and weakness on both method of learning and suggestion to improvise to benefit both group.

Key words: Social learning centre, long life learning, programme activities, strategies, processes, pillars of long life learning, triangulate, paradigm, effectiveness and efficiencies

INTRODUCTION

This study begins from the issues highlighted from article published in media in problem statement. Followed by study objectives, theory of triangulation and other related theory have demonstrated tools of triangulation from different source, theories and method. Validate performance of center over customer satisfaction in social learning center which is the triangulation methodology approach in combining multiple methods and theories for completeness purposes, (Sabina Yeasmin, 2012) significant of the study, schedule of questionnaires and schedule of interview and observation. In the analysis on validity and reliability of the primary data produces the finding including the finding on questionnaire, interview and observation. The final part is conclusion of this study.

PROBLEM STATEMENT

The triangulation method is in debating stage whereby analysis and reporting result can be vary. This study was adopted from theory of social learning, theory of activity, theory of customer satisfaction over the six (6) pillars (Freebody, 2017) pathway. This study resembles significant differences in objective, theories that involved, methodologies, sampling technique, data collection between two (2) different methodologies within a same study. Some unsolved validating process shown as weaknesses in various elements of theories that involved, methodologies, sampling technique, data collection. Some theories involved required a combination with the other theories. A justification and verification that serve for both studies need to be identified for credibility of data result.

STUDY OBJECTIVES

The long life learning and programme activities should now be recognized by educators, governing bodies, accreditation organizations, certification boards and employers but talent, skill and knowledgeable among elderly in Malaysia is discouraging. Unfortunately, government and private organizations were reluctantly in accepting talent, skill and knowledgeable from elderly. (UPM, 2019) The industrial 4.0 revolution should have an impact to the practicality or viability towards creating values to more demand and practical to the current market. Existing program is common and has less demand and practical to the current market thus it generates less interest among elderly. (UPM, 2019) Most programmes and activities create race polarization whereby one course dominated by single race. The Ministry of Women Development, Family and Community in the midst of developing

updated database for elderly profile specifically for active and productive elderly in Malaysia. (Masyarakat, 2013) With intervention of new technology would improve the delivery system of learning, managing the groups of elderly, analyzed the participant's achievement, managing effective and efficiency of activities. Amendments on policies, act, rules and regulation related to new concept of learning for active elderly set to find out the key tools of achievement of 'triangulation'; the usefulness of 'triangulation'; and the challenges of 'triangulation' methodology.

Among the primary objectives of this study is:

- i. To validate, justified and verified data triangulation purposes that should serve for the purpose of both studies.
- ii. To describe further extending the analysis between the two paradigms for completeness purposes (Sabina Yeasmin, 2012) as more than two methods of data analysis within the same study for completeness purposes. (Sabina Yeasmin, 2012)
- iii. To identify the strength of the methodologies, sampling technique, and data collection technique in overcoming weaknesses within the same study to increase the credibility of result.

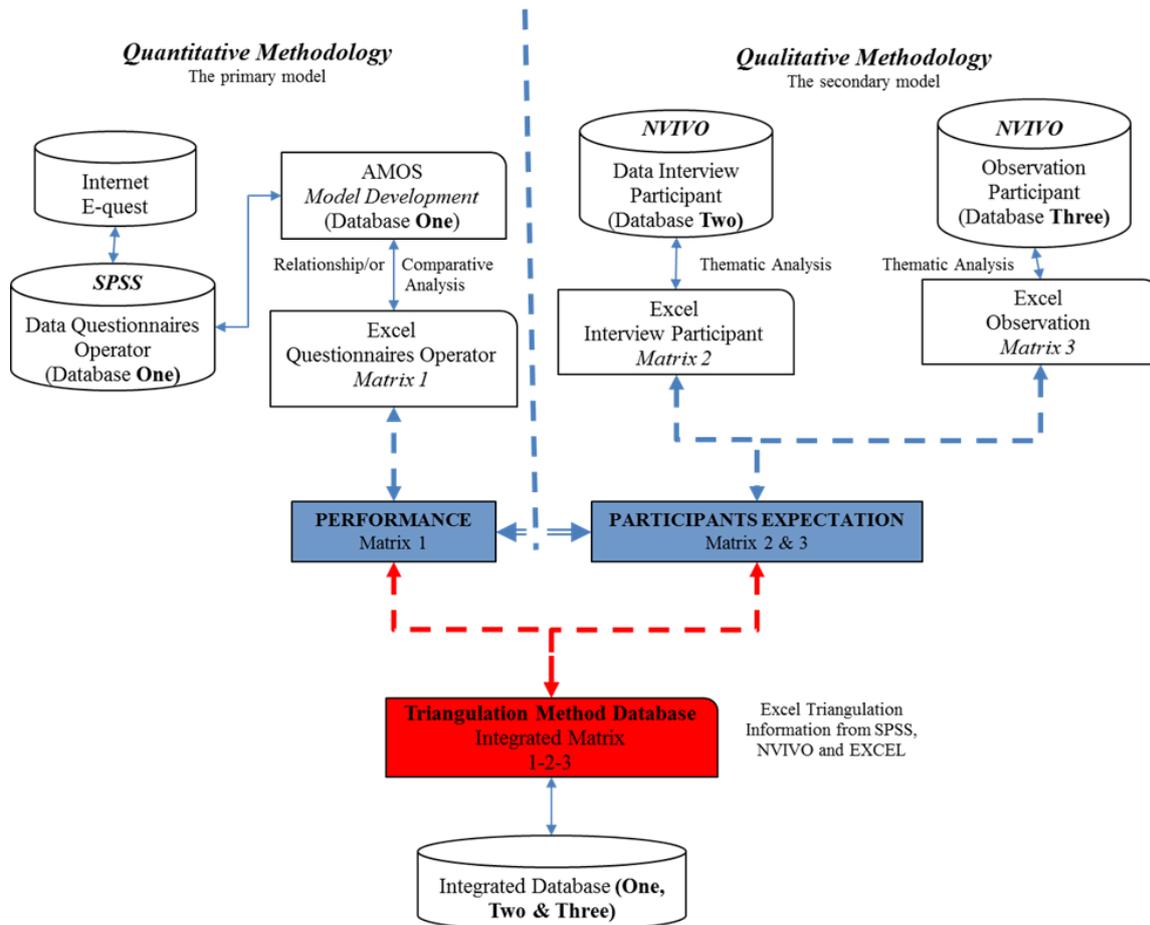
SIGNIFICANT OF THE STUDY

This study demonstrates the significant change in new concept of social learning and program activities inline within intervention of Industrial Revolution 4.0 environment. Apparently, the significant of customer satisfaction crafted a comprehensive, timely and reliable system of social learning primary model. The comprehensive system is able to manage profile of elderly; monitor and managing the courses; rollout the new and existing courses; registering potential elderly and managing e-classes and manuals. The proposed model system is practicing the daily programmed activities and social learning over six (6) oriented pillars. The proposed model embeds with strategies through processes in primary model of quantitative and secondary model of qualitative. As previously the long life learning is practicing manual system of manage profile of elderly; monitor and managing the courses; rollout the new and existing courses; registering potential elderly and managing classes and manuals.

THEORY OF TRIANGULATION

For validation purposes, triangulation uses two (2) methods of analyzing the same set of data. (Kimchi, 1991) 'Triangulation' tools was developed can only be done when data are available, whether they are data from different sources, different investigators, different theories or different methods. (Sabina Yeasmin, 2012) In the context of this study, data from questionnaires from operator was collected from October 2019 until end of December 2019, stored in Database 1, source of data collected thru whatsapp and email. Data from database 1 will be transforming into Matrix 1. This data measures the performance of social learning center. Data interview from participant collected from January 2020 until end of January 2020, stored in Database 2, source of data collected from face to face collection. Data from database 2 will be transforming into Matrix 2. This data measures the respond on facilities and services. Data observation was from centers where facilities and services located and assessed. Data was collected from October 2019 until end of December 2019 stored in Database 3. Data was collected thru representative participant to avoid bias. Data from database 3 will be transforming into Matrix 3. From the data availability, there are reasons why 'triangulation' should be used in handling dissimilar and trend data to generate greater confidence in observed findings.

Figure 1: The parallel data triangulation methodology

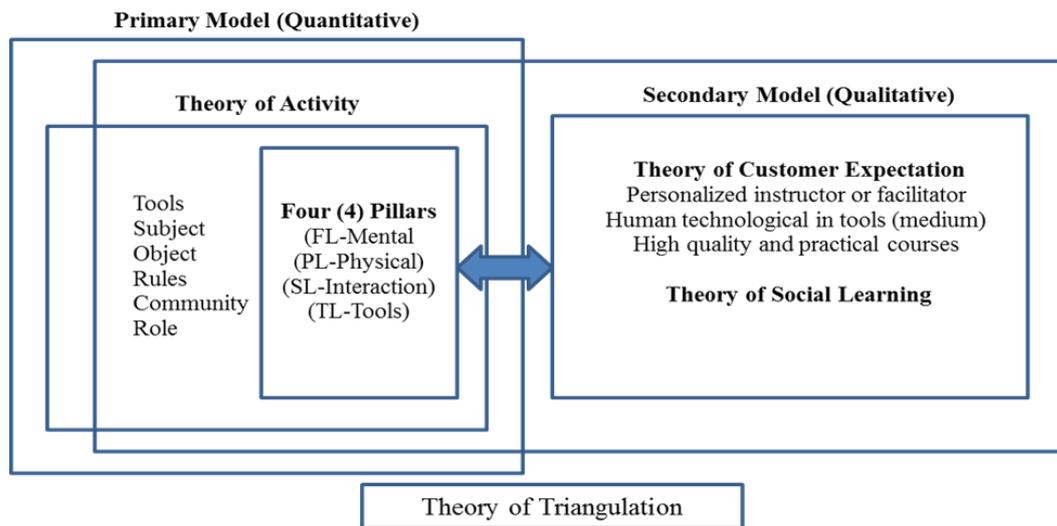


Data sources triangulation depicts the use of multiple data sources in the same study for validation purposes (Denzin, 1989), namely questionnaires data source from quantitative study, interview and observation data source from qualitative study. Completeness purposes (Sabina Yeasmin, 2012) increases in-depth and understanding of the phenomenon by combining multiple methods and theories.

DEMONSTRATING TOOLS OF TRIANGULATION FROM DIFFERENT SOURCE, THEORIES AND METHOD

Over four (4) pillars of long life learning (Freebody, 2017), this study categorized the requirement of social learning into formal learning (FL-Mental) including adult participation in formal learning including education attainment and gauge of paper chase, social learning (SL-Interaction) including volunteering, racial or religious discrimination and participation in communities organized by the community, personal learning (PL-Physical) including learning through culture, non-work related learning and health orientation, technologies for learning (TL-Tools) including use of internet for learning, use of internet to access information and frequency of ICT skills. As we age, our physiological and cognitive functions deteriorate, making it difficult to learn something new and this may impede our willingness and ability to participate in learning. (al., 1996)

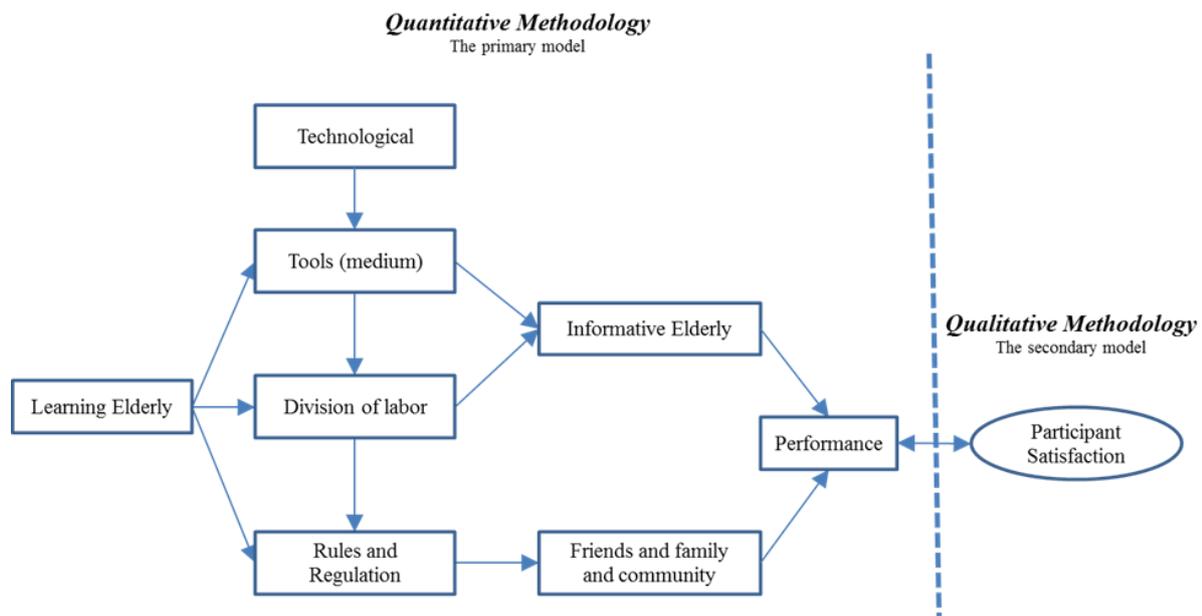
Figure 2: Different methods, theories and model in same study for completeness purposes



This study increases the validity by incorporating several viewpoints and methods which refers to the combination of theory of activities, social learning, customer expectation, on triangulation basics. The triangulation data sources from questionnaires survey, interview and observation accumulated in one study on a single phenomenon to converge on a single construct. Data then can be employed in both quantitative (validation) and qualitative (inquiry) studies. There are hundred fifty (150) responses from occupant of day care centre are quantified by questionnaires has been analyzed thru SPSS and AMOS and two (2) responses from operator of day care centre are qualified by text dialogue and audio recording within a week and observation within three (3) month will be analyzed thru NVIVO. Excel used to integrate between cases from NVIVO, AMOS and SPSS to determine factors contribute to the performance (Matrix 1) and determine theme contribute to customer expectation (Matrix 2 and 3) and finally the integrated database or triangulated database (Matrix 1, 2, 3). Refer to figure 1 above on the parallel data triangulation methodology. The convergent parallel data triangulation involves period of time above, the same two (2) centre of data collection and 150 occupant from two (2) centre (Matrix 1) two (2) operator (Matrix 2) and observation (Matrix 3) from two (2) centre. It demonstrates between qualitative and qualitative data movement within convergent parallel of triangulation methodology.

Figure 3 below demonstrated eight (8) quantitative variable plus three (3) qualitative variables between two (2) pronged of studies where it acquires rigorous data trustworthiness in data collection, analysis, and interpretation. Tool (medium) including face to face and e-learning mode; personalized instructor or facilitator, human technological in tools (medium) for both mode of learning; highly quality and practical courses and social interaction aspect. Finally the outcome of the study generates an informative elderly and knowledgeable family and community.

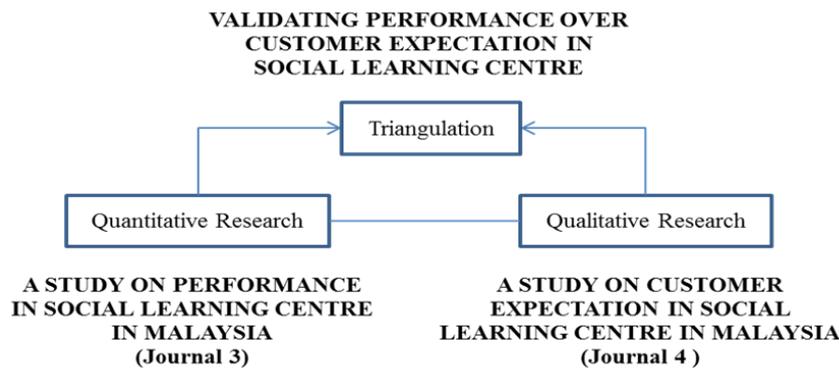
Figure 3: Variable in the primary model of social learning center



VALIDATING PERFORMANCE OF CENTRE OVER CUSTOMER EXPECTATION IN SOCIAL LEARNING CENTRE: A TRIANGULATION METHODOLOGY APPROACH

The shared value is including personalized instructor or facilitator, human technological tools (medium) and labor division and high quality, practical courses of primary model from this section. The main and sub-theme from qualitative interviews including the personalized instructor or facilitator, human technological tools (Medium) and labor division and high quality, practical courses. Over the interviews to facilities and services, this section has identified customer's predictive expectations which result from the difference between expected and perceived performance. (Oliver, 1983) The relationship between quantitative and qualitative methods will be viewed (Blaikie, 2007) particularly in evaluation research supported by combination of methods. There are two (2) types of method introduced in this study which is quantitative and qualitative method shown in figure 4 below. Validating performance in the context of this study is for completeness purposes. (Sabina Yeasmin, 2012)

Figure 4: Validating on multiple data sources from different qualitative and quantitative case study



The combination between quantitative studies in Journal 3 that demonstrating profit making over a period of three (3) months. Profit has been viewed as customer satisfaction on effectiveness of management and efficiencies of management organization. The purpose in specific contexts is to obtain confirmation of findings through convergence of different perspectives. (Denzin, 1989) The effective management in social learning is referred to as the internal environment of the organization. It refers to the organization setting including the leadership, organization culture and customer relationship management. The logical observation on facilities and services for attitude is organization efficiencies. The point of equilibrium is where the organization efficiencies in the effective management setting has meet the point of equilibrium between organization efficiencies (matrix 2: interview occupant) in the effective management (matrix 3: observation) over profit making for three (3) months (matrix 1: performance). The equilibrium between organization efficiencies in the effective management increases the credibility and validity of the results of findings. Validating performance in the context of this study is for confirmatory and completeness purposes. (Sabina Yeasmin, 2012) In confirmatory purposes depicted by various methodologists is the validation of qualitative results by quantitative studies. To validate the quantitative studies over the qualitative studies, it requires the cross-checking techniques in both methods used to provide confirmation and completeness (Sabina Yeasmin, 2012) which brings the point of equilibrium between two (2) types of research as explained above. This refers to produce the informative elderly and knowledgeable family and the community over the smallest possible expenditure of resources.

COMBINING MULTIPLE METHODS AND THEORIES FOR COMPLETENESS PURPOSES

By combining multiple observers, theories, methods, and empirical materials, triangulation methodology would become an effective tool to overcome the weakness or intrinsic biases and the problems that come from single method, single-observer, single-theory studies including the measurement bias is caused by the way in which data are collected in qualitative research and sampling bias causes as all the population under study are not covered. (Shih, 1998); In quantitative study, it is applied to confirm if instruments were appropriate for measuring a concept which could overcome challenges related to single-method, single-observer and single-theory biasness and thus can be applied to confirm the research results and conclusions. In completeness purposes (Sabina Yeasmin, 2012) for this study, it increases in-depth and understanding of the phenomenon by combining multiple methods and theories. It emerged in the literature above entitled theory of triangulation and other related theory where it allows for recognition of multiple realities.

The combination between quantitative studies entitled on performance in social learning centre in Malaysia will exhibit profit making over a period of time which validated the qualitative studies entitled customer expectation in social learning centre in Malaysia. The combination of different methods in the study of same phenomenon refers to as dependent variables of performance and customer expectation, characteristic of the sampling of variables, sampling techniques and questionnaires for quantitative and qualitative data collection. The cross-checking techniques in both methods used to provide confirmation and completeness (Sabina Yeasmin, 2012) which brings the point of equilibrium between two (2) types of research. It increases the credibility and validity of the results of findings. The purpose in specific contexts is to obtain confirmation of findings through convergence of different perspectives. (Denzin, 1989) Figure 3 below exhibit the Combining multiple methods and theories for completeness purposes. (Sabina Yeasmin, 2012)

This study apply two (2) mode of learning which is online or e-learning and face to face or offline learning involving five (5) factors. (Bandura, 1978) These types of data triangulation associated with idea of data richness varied on the time data were collected, people involved in the data collection process and the setting from which the data were collected. (Begley, 1996) Data sources triangulation depicts the use of multiple data sources in the same study for validation purposes (Denzin, 1989), namely social funding support (SFS), personalized instructor or facilitator (PIF), human technological in tools (medium) (HTT), high quality and practical courses (HQP), highly quality comprehensive manuals (HQM).

VALIDITY AND RELIABILITY OF PRIMARY DATA

The data analysis triangulation uses two (2) methods of analyzing the same set of data for validation purposes (Kimchi, 1991). The uses of both qualitative and quantitative data in this study, then more than two methods are needed in the analysis towards attaining data validation within the single paradigm; and further extending the analysis between the two paradigms for completeness purposes. (Sabina Yeasmin, 2012) The relationship between quantitative and qualitative methods will be viewed by (Blaikie, 2007), particularly in evaluation research; have advocated a combination of methods. Table 1 shows the Validity, reliability and credibility of primary data source between quantitative and qualitative.

Table 1: Validity, reliability and credibility of primary data source between quantitative and qualitative

Quantitative (Matrix No 1)	Validity (Viewpoints and Method)	Cronbach Alpha (Consistency)
Technology	0.877	0.792
Learning Elderly	0.807	0.816
Tools (Medium)	0.802	0.863
Division of Labor	0.883	0.883
Rules and Regulation	0.898	0.801
Informative Elderly	0.837	0.877
Friends, family & community	0.827	0.867
Performance	0.817	0.857
Qualitative (Matrix No 2 and 3)	Validity (Viewpoints/Method)	Reliability Consistency
Interview: (10) participant – Facilities and services on January 2020 - end of January 2020 stored in Database 2	The validity and base on detailed and schedule on interview which is not overlapped	The reliability base on detailed and schedule on interview which is not overlapped)
Observation: (2) centers Physical facilities and services October 2019 until end of December 2019 Time: 1:00-1:50 pm stored in Database 3	The validity base on detailed and schedule on observation which is not overlapped	The reliability base on detailed and schedule on interview and observation which is not overlapped

STRENGTH AND WEAKNESSES

Strength and weaknesses of the quantitative and qualitative methodology will be discuss in terms of Sampling Technique, data collection tools, Questionnaires, Observation, interview and where some of new method of collection would be reveal here.

Table 2: Strength and Weakness of methodologies, sampling technique, data collection

Methodology	Quantitative Methodology	Qualitative Methodology
Techniques	Sampling Technique	Sampling Technique
	The total of 150 was involved in this study from u3e, PAWE and private centre activities. Through method of stratified simple random, Klang Valley representing 80 and Selangor.	Ten (10) participants and two (2) centers involved in the study which is u3e and PAWE. Through method of stratified purposeful, 10% of 150, in Klang Valley and Selangor.
Strength	Questionnaires Sampling	Interview and observation Sampling
Method data collection	The quantitative method of this study uses questionnaires for data collection. Questionnaires survey to 80 operators in Klang Valley and 70 operators in Selangor required questionnaires to determine the factor involved in the development of social learning centre.	The interview to participant required closed ended structured to obtain the participants' experience in class. An observation on facilities and services provided and promised made by the operator will be conducted in two (2) premises in Klang Valley and Selangor.
Weakness	Method and Schedule	Method and Schedule
Tool of data collection	Questionnaire begins form October 2019 until end of December 2019 (bin Ali, Performance, 2020) whereas the qualitative begins before questionnaires session ended Mail surveys (CASI, CSAQ) means data collection from target group through mail,	Interview begins from January 2020 until end of January 2020 and observation from October 2019 until end December 2019. (bin Ali, Expectation, 2020) Observation will be made on facilities or equipment and services, which has been promised

	internet and mobile whatsapp. Data collected thru e-surv.com from mobile phone and mail. Required edit before send to database.	by the operator. Data collected for observation need transcript into verbatim. It is time consuming.
Strength	Data collected	Data collected
	Questionnaires designs don't require complex collection of data as sources of evidence for questionnaires survey. Making data only in numbering by theory and models. Because quantitative data analysis is base on statistical analysis. Data is objective and exact represented with numbers.	Interview and observation designs require complex collection of data as sources of evidence. Data in graphics and video and text requires idea aided by theory and models. Techniques, strategies, and procedures have been developed to extract meaning from their data including software.
Facts	Facts of quantitative method	Facts of qualitative method
	<ol style="list-style-type: none"> 1. Tests hypotheses from theory, generalizes sample to population where standardized tests and instruments measure various conceptual elements. 2. Precise measurements and objective in data collection. 3. Significance level in conducting analysis after data collection in laboratory. 4. Uses instruments with standard and scientific method properties. 5. Generates a report that follows a standardized format. 6. Often measures a single-criterion outcome eg: Usefulness of validity for predicting performance. 7. Often uses large sample sizes determined by power analysis or acceptable margins of error. 8. Uses data statistical scales from questionnaires. 9. Uses reliable and valid data. <p>Source: (Lacey, 2009)</p>	<ol style="list-style-type: none"> 1. Generates understanding from patterns and applies ideas across contexts from interviews and observations. 2. Attends to accurate description of process in words, texts and observations. 3. Deep understanding in conducting analysis with data collection in fieldwork. 4. Skill researchers (instrument) in observing, recording, and coding. 5. Generates a report of findings includes words, sentences, gestures and voice. 6. Offers multiple sources of evidence (triangulation). 7. Often studies single cases or small groups that build arguments for the study's conformability. 8. Uses interview text as data. 9. Performs data analysis in a creative, iterative, nonlinear, holistic fashion. <p>Source: (Lacey, 2009)</p>

CONCLUSION

'Triangulation' in the context of these studies is a validation, deepening and widening understanding on issues highlighted in problem statement, study objective and research questions. Findings on both section increases credibility by improving both internal consistency and generalizability through combining both quantitative and qualitative methods in the same study. Triangulation is cost effective methodology where within in same studies, by using the different data sources to validate and identify the reliability from different section. Human resources in the context of this study are the presenter which is selected talent elderly. 'Triangulation' in this study does not require the collection of new data. The same data from different database will be cycled to support finding in quantitative studies. Interview to participant to obtain the participants' experience and observation on facilities and services provided as promised made by the operator and elaborate in depth the criteria of instructors or facilitators. This study has generates rich amount of data in assisting to develop hypotheses for quantitative investigations. Especially for unexplored and less researched for completeness purposes, (Sabina Yeasmin, 2012) come up with credibly testable hypothesis for quantitative methods usage. The personalized instructor or facilitator, human technological or technological in tools (medium) and high quality and practical courses is crucial issue in any learning centre. Participant accumulates response in terms of body language of dissatisfaction, attendance time and complaint or suggestion by participant over the activities. Management should take a quick action by providing the question and answers and open round table for discussion where this could motivate and influence participant, family and community to change their mindset. Source of observation complement and verified interviews and the same goes to interviews will complement and verified questionnaires in quantitative study. Rich amount of data from observation and interviews assist to develop hypotheses for quantitative investigations, this is for unexplored and less researched for completeness purposes. (Sabina Yeasmin, 2012) Triangulation method between qualitative and quantitative data helps to form a rigorous or precise framework.

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