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Nominal Group Technique Application towards the Formation of Social Skills and Values Elements for Apprenticeship Competency Models

Norhayati Yahaya¹, Mohamad Sattar Rasul², Ruhizan Mohamad Yasin³, Mohamad Sulaiman⁴

^{1,4}Centre for Instructor and Advanced Skill Training (CIAST), Shah Alam, 40900, MALAYSIA

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Abstract: Abstract is compulsory. This study discusses Nominal Group Technique as an alternative strategy for developing a list of social skills and values elements of the apprenticeship competency model. Social skills and values are some of the crucial parts of the TVET system and are to be considered as an additional incentive to the graduates. This study was conducted in the second phase (Development Stage) of researcher's research based on expert's consensus in identifying, accepting and ranking the social skills and values elements. The Modified Nominal Group Technique data analysis was determined based on the score given by all of the panels, of experts' votes, which were converted into percentages and compared with the terms set. The experts' agreement determined the final elements of social skills and social values. The voting process was aimed at determining the priorities of each of the element according to the preference of each expert that was based on individual scale interpretation. The Modified Nominal Technique group contains five stages: research briefings; idea generation; sharing and discussing ideas; voting through questionnaire; and presentation of findings. The findings of this study have identified a sum of 24 elements of social skills and values in the initial stage and finally, 20 elements of social skills and values were chosen as a component in the development of the model. In addition, the findings have shown that this technique has helped researchers to get the information effectively and rapidly due to the development of the model that can be obtained specifically through percentage score items tested based on experts' consensus

Keywords: Apprenticeship, consensus, nominal group technique, social skills and values

1. Introduction

The researcher aims to develop an apprenticeship competency model. The apprenticeship competency model is a guide to creating a training focused on the elements of Social Skills and Social Values to implement the National Dual Training System Program. Overall, there are three phases in this study, namely needs analysis, model development and usability evaluation where the Design and Development Research (DDR) approach is used (Richey & Klein, 2007). In the first phase and for the first research question, the survey method was conducted at the public and private skills training institutes to identify the elements of social skills and social value elements of the NDTS program from the perspective of teachers and employers. This paper will address the second phase of the study in which the Nominal Group Technique (NGT) will be used in the development of the social skills and values for the apprenticeship program. The findings have been analysed using the IBM SPSS Statistics which involved twenty-two questions on social skills and values.

^{2,3}Faculty of Education, Universiti Kebangsaan Malaysia, Bangi, 43600, MALAYSIA

^{*}Corresponding Author

The majority of trainers have stated that they lack of the application of social skills and values education training during teaching and learning in the apprenticeship program. The findings show that 82.6% respondents stated that less materials or resources were directly attributed to social skills and values during the teaching and learning process for the apprenticeship program (Thakore, 2013). Hence, by identifying the right elements of social skills and social values, the training instructors or trainers will be able to enhance appropriate training to improve one's work performance, skills and competence to form an effective organisation (Thakore, 2013). Training involves the process of applying social skills and values to the apprenticeship program will helps apprentices prepare for real-world jobs, including strengthening self-confidence, enhancing social skills and values and improving relationships with apprenticeship learning environments (Norhayati, Mohamad Sattar, Ruhizan & Salpiah, 2017).

The second phase of the research in DDR involves the use of the Interpretive Structural Modeling (ISM) approach which requires a group of experts in the field of decision-making. This approach was introduced by Warfield (1973; 1974; 1976). One of the procedures in ISM requires expert groups to discuss ideas and issues raised related to the identified indicators. For that purpose, the modified Nominal Group Technique (NGT) has been used to examine the selected elements before the ISM process is executed. The usability evaluation phase which is the final phase of this study used the Fuzzy Delphi method (FDM) technique in evaluating the perceptions and satisfaction of executors on the developed model. The following Fig. 1 is a flowchart related to the method used in this study.

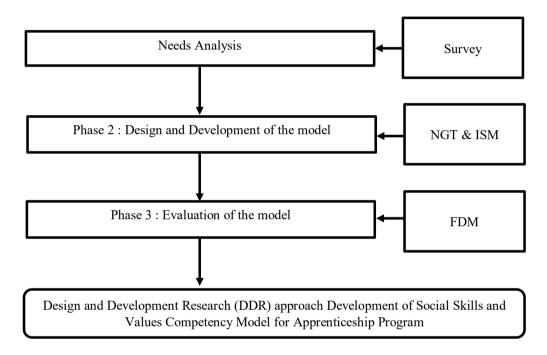


Fig. 1 - Research Flow Chart

Based on the latest study done by Rahim and Khadijah (2010), it has been learned that social skills and values can and should be educated to apprentices to improve their employability skills and to expel any hindrances for upward mobility in their professions (Zool Hilmi, Norzaini & Mohamad Sattar, 2019). Trainers and coaches can coordinate social skills and values in their educational programs to furnish apprentices with the inculcation of human and social competence required to be a viable workforce to confront the Fourth Industrial Revolution (4IR).

The elements of social skills and values as suggested by Rahim and Khadijah (2010) are important for enhancing employability skills among Malaysian graduates. The importance of employability skills has been widely discussed in studies at the national and international level (Azizan & Lee, 2011, Rahim & Khadijah, 2010, Rahim & Khadijah, 2007, Ismail, & Zainal Abidin, 2010, Rasul, Ismail, Ismail, Rajuddin & Abd Rauf, 2010, Yahaya, Rasul, Yasin & Suradi, 2017Asonitou, 2015, Maripaz, Ombra & Osman, 2013, Nilsson, 2010, Pool & Sewell, 2007, Robles, 2012. In the Malaysian context, the study by Ismail (2012) on graduate employability from the employers' perspectives is very relevant to be discussed. Ismail (2012) found a gap between actual performance of graduates and the expected performance by employers in Malaysia. This shows that shortcomings still exist in employability skills development among graduates in Malaysia.

In the context of this study, the theory of constructivism learning supported by the creators of the theory, such as John Dewey (1859), Vygotsky (1963), Jerome Bruner (1966) and Jean Piaget (1977) were used. The learning style practiced in this theory is holistic, guiding apprentices in the construction of new knowledge and student-centered. The learning Theory of Constructionism (Papert 1980) is rooted in the theory of learning constructivism (Piaget 1953).

These theories emphasize the concept of knowledge restructuring, which is the knowledge of restructured apprenticeships to build new knowledge based on existing knowledge. In the context of this study, apprentices use knowledge and skills as instruments of individual power. The idea of engaging in activities that involve inquiry and behavior will begin at the beginning of the project. Collaborative restructuring of ideas promotes and enhances knowledge building and at the same time enhances social skills and social values as apprentices have the opportunity to practice them in real situations. The ability of the apprentice to complete the project and explain the design or how it works indicates that the apprentice has a deep understanding. Success in project completion will encourage apprentices to continue to pursue more complex ventures and ultimately lead to greater intellectual development and engagement. If this process happens again and again, new ideas will always be built and developed. The approach of constructionism encourages the process of self-reflection to integrate intellectually and emotionally with new knowledge to make new knowledge more meaningful.

The purpose of this study was to obtain experts' consensus in developing social skills and values competency model for the apprenticeship program using NGT. The RQ are as follows: a) What are the elements in the social skills and values competency model for the apprenticeship program based on expert agreement? b) What are the appropriate elements to be a priority in the social skills and values competency model for the apprenticeship program?

2. Methodology

In this study, researchers applied the modified nominal group technique to derive and identify the elements of social skills and values. The classic Nominal Group Technique is a recurring procedure to incorporate different individual opinions to achieve an agreement on any issue studied (Delbecq, Van de Ven & Gustafson, 1975; Cromer, 1991). The identification of these elements is based on the panel of experts' views and consensus. A total of 13 experts who were directly involved with the dual system apprenticeship program were identified.

2.1 Nominal Group Technique

Nominal Group Technique is a process of brainstorming for ideas (Dang, 2015) in a small, face-to-face group to make decisions (Horton, 1980) determining priorities (McMillan, King & Tully, 2016) and to solve and structure problems to reach a consensus in extensive issues (Mohd. Nasurdin, Osman & Ahmad, 2006; Williams, White, Klem, Wilson, & Bartholomew, 2006) that are semi-quantitative and structured (Dobbie, Rhodes, Tysinger, & Freeman, 2004; O'Neil & Jackson, 1983; Perry & Linsley, 2006). The technique is semi-quantitative technique as there are qualitative techniques involved, as it started with the brain-storming session (qualitative), followed by the process of sequencing the ideas based on priority (quantitative) (O'Neil & Jackson, 1983). The technique shows the percentage and the experts' level of acceptance towards each element and the priority of the elements. Hence, the Nominal Group Technique requires each group member to generate ideas, allows the participation of each member, prevents individual influence from dominating discussions, and reduces individual pressure to be influenced by the opinion of other members Nasurdin, Osman & Ahmad, (2006), Lomax & McLeman, (1984); O'Neil & Jackson, (1983).

Nominal Group Technique generates both positive and negative opinions, produces a lot of comments and creative ideas, encourages participants to weigh the overall importance of each item on the list of ideas and suggestions put forth by group members (Williams et al., 2006). In implementing the Nominal Group Technique, group interactions are fully monitored by a leader or facilitator (Perry & Linsley, 2006). According to O'Neil and Jackson (1983), facilitators of the Nominal Group Technique must be fair and neutral in accepting ideas of the group members, and is capable of managing the flow of information within the group. Facilitators cannot intervene or offer ideas during discussions as the policy is that facilitators act as the compiler of ideas suggested by the participants. Facilitators are also not supposed to assess anybody's ideas, or make decisions, and must allocate ample time for the participants to think, and do not allow the participants to challenge each other. There are six strengths of the Nominal Group Technique according to Delp, Thesen, Motiwalla and Seshardi (1977) including:

- Nominal Group Technique could leverage the level of education and position of the study's participants where each participant is given the chance to debate based on their experience and knowledge on certain issues.
- The implementation of the Nominal Group Technique is in the form of groups and face-to-face, hence it provides the platform for each participant to focus on the issue being researched.
- Nominal Group Technique has the idea-generating phase where each participant is given the chance to voice their ideas without being criticised by other participants.
- There is a phase where all ideas generated from participants are noted down to ensure that the ideas are documented.
- There is a discussion phase where each item and issue could be discussed to avoid any misunderstanding among the participants.
- It could enhance the creativity of each participant in the research as they are provided the platform to discuss and voice their ideas based on their knowledge and creativity

One of the most challenges in the Nominal Group Technique was the knowledge of the panel experts to the study and their duties. The NGT is structured, includes no preliminary discussion, yet gives a chance to accomplish a generous measure of work in a generally brief time. The outcomes are prompt with no prerequisite for further input from a panel of experts.

In view of the contentions of Delp, Thesen, Motiwalla and Seshardi (1977), they stated that there are six strengths for NGT Techniques: (1) The approach of this technique is able to generalize the level of education and the rank of study participants in which each study participant is allowed to argue based on their experience and knowledge to an issue; (2) The implementation of this technique is grouped and face-to-face and it can provide participants with the opportunity to focus on the issues being studied; (3) This technique has a thought stage where each participant is allowed to record their ideas without being criticised and disturbed by other participants; (4) Have a stage to record any ideas that are triggered in order to abstain from losing the ideas found in the study participants; (5) Have a discussion stage aimed at explaining in detail a number of issues and issues to avoid misunderstandings between participants of the study; and (6) It is able to enhance the creativity of each study participant as each participant is allowed to argue and trigger ideas based on their knowledge and creativity. In the context of the research, researchers identified the procedure of the Nominal Group Technique where there were five stages, which is similar to studies carried out by Cromer, (1991), Dang, (2015), Harvey & Holmes, (2012) and Williams et al., (2006).

2.1.1 Stage 1: Briefing on The Research That Will Be Carried Out

The researcher played a role of the facilitator for the brainstorming session by introducing all the panellists, explaining the objectives of the session, and providing the background information and the research objectives. The introductory session was very important to ensure that each expert get to know each other better and would be comfortable to interact with each other. The researcher explained the details and the research procedures to design the competency model social skills and values for the apprenticeship program. The venue chosen for the brainstorming session for the Nominal Group Technique was deemed comfortable and conducive to ensure that the session was productive. The facilitator was the key figure in ensuring the brainstorming sessions was successful and managed to influence a smooth Nominal Group Technique session. In this study, the researchers did not use the Classic Nominal Group Technique which required a longer period, especially in documenting ideas from experts during brainstorming sessions. Instead, the researchers opted for the Modified Nominal Group Technique that contained early drafts on elements. The early drafts of elements are derived from Rahim, Aroff, Abu Samah, Hamzah, Noah, and Kasa, (2007). In this study, the researchers utilise the term social skills and values as this is in accordance with the National Dual Training System, Ministry of Human Resources, Malaysia. The early draft was the research's first instrument that provided a clear picture to the panellists involved in the Modified Nominal Group Technique session to generate optimum ideas. Indirectly, it provided a description on the research scope, apart from initiating early ideas among the panel of experts.

2.1.2 Stage 2: Generation and Explanation of Ideas by The Panel Of Experts

Generation ideas of each element were produced through the brainstorming session. A total of 13 experts who were directly involved with the apprenticeship program were identified. Each expert was allowed to suggest ideas and justification for the idea. The panel was given the opportunity to query ideas or elements that were unfamiliar or unclear at this stage of the workshop session. The experts were also allowed to propose extra ideas that were deemed suitable with the elements of the competency model social skills and values for the apprenticeship program. This method managed to shorten the time needed for the process of Nominal Group Technique Classic from 4 hours to a mere 90 minutes.

2.1.3 Stage 3: Sharing and Discussion of Ideas Among The Panel of Experts

All the ideas generated by the panel of experts were listed on a whiteboard to be shared with others. They were allowed to discuss the ideas or elements from the social skills and values competency model for the apprenticeship program. At this stage, the facilitator had to read out each element with a brief explanation. The experts could also explain in detail or make comments on any featured element to rationalise the selection of the elements. If there was any a redundant idea or elements, they could be combined or categorised according to the consensus of the panel of experts to produce the final list of elements for the social skills and values competency model for the apprenticeship program. The final list was used as the second instrument of the study.

2.1.4 Stage 4: Voting Through Questionnaire Based on Ideas Proposed by The Panel of Experts

In the Nominal Group Technique workshop session, the experts were asked to give opinions which were then channelled into a model of questionnaire that was provided to each expert who was given some time to evaluate all items or elements of the social skills and values competency for the apprenticeship program. Voting was carried out individually to determine the importance of each element. The agreement and suitability value in the Likert Scale chosen by each expert provided the score value for each element evaluated. The score value was then transferred into

the form of percentage to determine whether the interpreted data of each element evaluated was suitable and could be used. The term is in line with the study carried out by Deslandes, Mendes, Pires, and Campos (2010) which stressed that an element would only be accepted if the percentage of score given by the experts was equal, or more than 70.0%. The voting in the Nominal Group Technique was not meant to eliminate or abolish the elements agreed by the panel, but was meant to determine the sequence of importance for each element. The ranking utilised was in the scale of 1 to 7 where 1 shows the least favourable and 7 the most favourable item.

The selection of the 1 to 7 scales was to provide a larger scope for the panel of experts to state their agreement. It provides better opportunity for the experts to determine the order of importance and reduce the possibility of overlapping. The numbers provided by the experts were then calculated to determine the value amount for each element. The element with the highest total amount is the element with the highest priority. Scale 1 to 7 was used to determine the ranking of the elements, with scale 1 rated as Least Favourable and scale 7 rated as Most Favourable. The scale chosen by each expert was gathered, and it will provide the priority value for each element in the competency model social skills and values for the apprenticeship program. The data analysis process involved the score value voted by the experts were then turned into percentages and were compared to the terms set. The ranking process was done so that the following sessions would be easier for the researchers. Once completed, the questionnaire sets were collected by the facilitators.

2.1.5 Stage 5: Presentation of Findings

The facilitators would key in all the voting data from the questionnaire into the Microsoft Excel to be tallied and the elements were then ranked according to the priority value based on the experts' percentage of agreement and level of acceptance. Then, the finding from this stage was presented to the panel of experts. The element with the highest total was placed in the highest rank in the final list of the elements for the competency model social skills and values for the apprenticeship program. The flow chart for the modified nominal group technique session summarised the procedure as elaborated in Fig. 2.

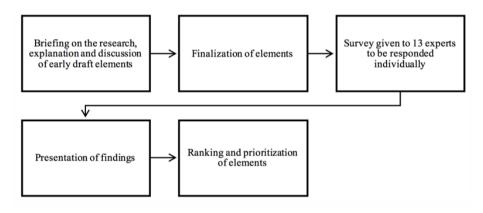


Fig. 2 - Flowchart of modified nominal group technique session

2.2 Panel of Experts

The main criteria in selecting the panel of experts was that the participants of the study must be knowledgeable, skilful, and have a very good understanding in the field studied (Dalkey & Helmer, 1963). There was a debate on the optimum group size in applying the Nominal Group Technique. The study by Williams et al., (2006) proposed between 5 to 9; while Carney, McIntosh & Worth (1996) suggested at least 6 experts; Allen, Dyas & Jones (2004) proposed between 9 to 12 experts; the study by Harvey and Holmes (2012) named between 6 to 12 experts. Meanwhile, the research by Dobbie, Rhodes, Tysinger & Freeman (2004) involved between 30 to 40 experts. The number of experts suggested increased to 36 (Perry & Linsley, 2006) and there was even a proposal for 92 experts for each study (Williams et al., 2006). Hence, this study has chosen to involve 13 experts for the panel, that included curriculum developers, teaching experts, national industrial expert, JPK senior officers, IPTA senior lecturers, SLDN coaches, SLDN trainers and SLDN coordinators. The rationale of the experts' selection was due to their direct involvement in training and nurturing the social skills and values for the apprenticeship program. The criteria for selecting the group members were very important to improve the reliability and validity of the Nominal Group Technique and to determine the suitable discussion questions Williams et al., (2006).

3. Results and Discussion

The result of the findings from the modified nominal group technique is used to determine the social skills and values elements that ought to be incorporated into the competency model. Towards the finish of the modified nominal group technique session, the experts proposed and consensually concurred on the final list of social skills and values to develop the competency model. Table 1 demonstrates the ranking and prioritisation of the social skills, whereas Table 2 demonstrates the ranking and prioritisation of social values based on the experts' individual voting choice. The voting session was not to eliminate any elements at the last stage of modified nominal group technique since every one of the experts has officially chosen on the final list. The design was to rank the level of the experts' individual inclination for each of the elements in view of scale 1 to 7.

8							,			0					
Social Skills	Experts														Priority
Elements	1	2	3	4	5	6	7	8	9	10	11	12	13	vote	111011ty
Team working skills	7	6	7	7	6	7	7	6	7	6	7	7	5	85	1
Communication skills	7	6	7	7	6	7	6	6	7	7	6	6	6	84	2
Problem-solving skills	7	6	7	7	6	6	7	6	6	7	7	5	6	83	3
Leadership skills	7	5	7	7	6	6	7	6	7	7	6	6	5	82	4
Multi-tasking	7	5	7	7	6	7	5	7	7	5	6	5	5	79	5

Table 1 - Findings of Modified Nominal Group Technique: Ranking and Prioritisation of Social Skills Elements

Referring to Table 1, the result of modified nominal group technique indicates 5 social skills that were settled upon by the experts as the elements for the development of the competency model. The table demonstrates the ranking numbers for every element given by the experts. The lowest ranking number showed by the experts is 5, which specifies "Very Favourable" and the highest value given is 7, which designates "Most Favourable". The aggregated ranking numbers determine the priority value for the social skills elements. Based on the priority values calculated as appeared in Table I, the social skills elements could be organized as Figure 3.

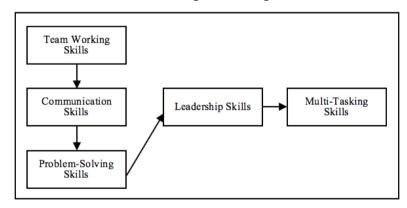


Fig. 3- Social Skills Elements According To Its Importance

The findings of social skills show that team working skills have the highest position compared to other skills. Team working is a skill that is often practiced by apprentices during the teaching and learning process, such as the implementation of projects and work in the workshop. Ismail, and Zainal Abidin (2010) and Seetha (2014) study on the need for soft skills in the Malaysian working environment found that lack of social skills and values is said to represent high graduate joblessness. Another study on novice teacher perceptions of soft skills needed in the present working environment demonstrated that team working skills and communication skills were the two most essential refereed to Tang, Ching, and Shahid, (2015). Apprentices need to understand that when they go out into the real situation working environment, communicate in English is imperative and indispensable (Azizan & Lee, 2011). A study conducted by Lussier (2012), Rasul, Ismail, Ismail, Rajuddin and Abd Rauf (2010) and Yahaya, Rasul, Yasin and Suradi (2017) showed that great job execution relies upon technical and also social competence and that career advancement is determined more by social skills and values rather than by technical skills alone; thus, social skills cannot be left to happen naturally through impact of family, companions and society. The findings from Mohd Affandi, Amiruddin, Che Hassan and Zainudin (2015) proves that to identify the problem that exists is the first step in the problem-solving

process. This may be due to a problem solving should be made after the root cause and the problem of validity can be identified.

Leadership skills show that someone with excellent leadership is able to analyse the situation complex with exact and fast. In addition, always giving appreciation and praise to the members of the group is also a prestigious character. This is parallel in saying that acclaim or appreciation is an extremely helpful lift to enhance individual performance, group performance and organisational performance (Tang, Ching, & Shahid, 2015). Thompson (2011) thinks that their findings prove that most of the students in the field of technical and vocational education are more focused on teaching and learning processes that are closely related to theory and practice, this directly causes these students to experience deficiencies in the process of formation human capital and subsequent fellow relationships are less applied with social skills and values elements (Robles, 2012). Ranking and prioritisation of social values based on the experts' individual voting choice is indicated in Table 2 below.

Table 2- Findings of Modified Nominal Group Technique: Ranking and Prioritization of Social Values Elements

Social Values	Experts														Priority
Elements	1	2	3	4	5	6	7	8	9	10	11	12	13	vote	rriority
Negotiation	7	6	7	6	7	7	7	6	7	6	7	5	6	84	3
Compliance	7	5	7	6	7	7	7	6	7	7	7	5	6	84	3
Cooperation	7	7	7	6	7	7	7	6	6	6	7	6	6	85	2
Confidence	7	6	7	6	7	6	7	6	7	7	7	6	6	85	2
Diligence	7	7	7	6	7	6	7	6	7	7	7	4	6	84	3
Appreciation	7	5	7	6	6	6	7	6	6	6	7	5	6	80	7
Honesty	7	5	7	6	7	7	7	6	7	7	7	6	6	85	2
Justice	7	5	7	6	7	7	7	6	6	6	7	6	6	83	4
Meticulousness	7	5	7	6	7	7	7	6	7	7	7	6	7	86	1
Patience	7	5	7	6	7	7	7	6	7	7	7	6	7	86	1
Courtesy	7	5	7	6	7	6	7	6	7	6	7	5	6	82	5
Punctuality	7	5	7	6	7	7	7	6	7	7	7	6	7	86	1
Rationale	7	5	7	6	6	6	7	6	6	6	7	5	5	79	8
Independence	7	5	7	6	6	5	6	6	7	7	7	6	6	81	6
Creativity	7	4	7	6	7	5	5	6	7	7	7	4	6	78	9

Referring to Table 2, the result of modified nominal group technique indicates 15 social values elements that were agreed upon by the panel of experts. The table demonstrates the ranking numbers for each element given by the experts. The lowest ranking number showed by the experts is 4, which specifies "Favourable" and the highest value given is 7, which designates "Most Favourable". The aggregated ranking numbers determine the priority value for the social values elements. In view of the priority values figured as shown in Table 2, the social values elements could be structured as Figure 4. The most important elements agreed upon by the panel of experts is not limited to one element, but can be found in the same level as the three most important elements, namely meticulousness, patience and punctuality for first ranking. Followed by second ranking, namely cooperation, confidence and honesty. Third Ranking namely negotiation, compliance and diligence and the rest of the elements are for different ranks.

Social skills and values are basic accomplices of technical knowledge and skills to guarantee great job execution in organizations (Maripaz, Ombra & Osman, 2013). To introduce accentuation on knowledge workers as an imperative spencerty of work and capital, the blend of technical knowledge and skill with social skills and values in the development of k-workers is crucial for managed and proceeded with development of the economy, particularly developing economies. (See Fig. 5) (Zenger & Folkman, 2002). An effective worker collaborates positively with supervisors, colleagues and clients. An effective worker ought to constantly enhance his/her competency to keep pace with changing innovation to create the most elevated quality product. To top everything, an effective worker has uplifting states of mind towards work and exceptionally dedicated to the objectives of the association where he/she

works (Rahim & Khadijah, 2007). Social skills and values training, particularly enhancing apprentice's employability skills for work markets. The technical skills, and the social skills and values, in some type of a "blend" ensure a fruitful profession for the individual workforce and in addition an effective organisation ready to withstand a solid worldwide rivalry (Rahim &Khadijah, 2010).

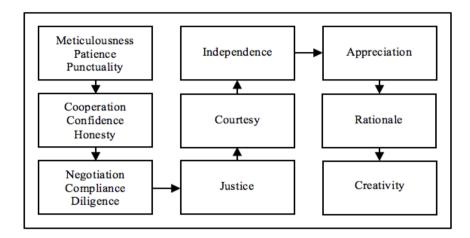


Fig. 4 - Social Values Elements According To Its Importance

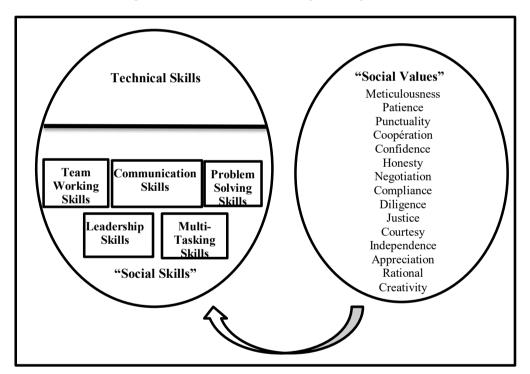


Fig. 5 - Social Skills and Social Values for a Holistic K-Worker

This study creates a structured learning environment to enable apprentices to explore and achieve information on social skills and social values. Learning social skills and values should start with the element that occupies the highest ranking and followed by elements with lower rankings. This fact is in line with the theory of constructivism learning. This theory is an active and dynamic learning theory. This theory emphasises the active involvement of apprentices in building new knowledge (Garrison & Arbaugh, 2007) of social skills and values and refining existing knowledge. This is in line with Bandura (1995) of which mastery experiences inside the employability agenda or work experience, practical in workplaces, where apprentices find the opportunity to be required with activities, for example, making work applications.

The next step is to transform the knowledge of social skills and values by forming their own understanding. According to Bandura (1995), vicarious experiences happen when apprentices can see other people who have made progress. The nearer the others are in comparability to themselves, the more compelling the experiences are. The last step is to evaluate or reflect on the learning process passed. Social influence happens when individuals are induced that they have the abilities expected to ace a specific experience. This urges them to invest more exertion and remain

motivated to keep in mind the end goal to make progress in their objectives (Bandura, 1995). There is an essential part for trainers and coaches to play here, specifically in the manner by which they give feedback to their apprentices. Therefore, apprentices need to be exposed to a systematic learning activity so that they can connect each element to another, but it can also stimulate apprentices to explore information effectively (Nelson & Basham, 2014).

4. Conclusion

This study contributes to new knowledge in the research methodology used. The Modified NGT session is functioned to develop and contribute ideas for identifying key components and key elements of the development of Social Skills and Values Competency Model for Apprenticeship based on the expert panel's. The findings identified five main social skills elements and 15 social values elements that must be included in the social skills and values competency model for the apprenticeship program. The main social skills element identified was teamwork, while other vital social skills elements chosen by the experts were meticulousness, patience, and punctuality.

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