

## THE IMPACT OF LEARNER PROFILING ON SOCIAL SKILLS

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### ABSTRACT

The purpose of this study is to describe the use of personality traits dimensions to predict skills. This paper focuses on the social competency dimension. The study also explored some basic questions about why learners learn, what are their main barriers and what are the expected rewards. Two intake groups were used in this study: 1041 September 2017 learners and 278 May 2016 intake students. May 2016 intake students are in their 4<sup>th</sup> semester during September 2017. An online instrument was developed based on literatures. The findings indicated that the top reasons for students to study were to obtain higher qualification (39.1%), personal growth (25.5%) and career advancement (23.3%). The findings also confirmed that work and family situation is the main barrier in adult students learning. All dimensions which include the big five personality traits, self-efficacy, self-directedness, attitude towards education and motivation towards achievement show significant correlation to the social competency.

*Keywords: Learner Profiling, Personality Traits, Self-efficacy, Online Evaluation Tool, Social Skill*

### INTRODUCTION

Open University Malaysia (OUM) is the premier private open and distance learning (ODL) institution in Malaysia. It was established on 10 August 2000 to promote lifelong learning. Its aim is to increase knowledge-workers as a strategic move towards becoming a developed nation. As an ODL institution, OUM has a learner population who are largely working adults with diverse capacity and multifaceted challenges. Therefore, OUM established a vision towards becoming the leading provider of flexible learning in the country. Its mission is to widen access to quality education and provide lifelong learning opportunities by leveraging on technology, adopting flexible mode of learning, and providing a conducive and engaging learning environment at competitive and affordable cost. In widening access to education, OUM became the first private higher education institution to implement 'open entry' and currently operates as an Accreditation of Prior Learning (APEL) Assessment Centre. OUM is committed to its mission to provide quality education by ensuring that all its programmes are designed in line with the national quality assurance framework (the Malaysian Qualification Framework or MQF) that is governed by the Malaysian Qualifications Agency (MQA). OUM through its Learning

Technology Unit further enhances lifelong learning opportunities by leveraging on technology by expanding the adoption of flexible mode of learning to provide a conducive and engaging learning environment. Given this scenario, OUM is faced by a need to create a unique balance between operating as a private institution and creating learning opportunities for all. The university continues to seek and develop innovative strategies to meet its challenges.

Today, ODL institutions are almost synonymous with online learning providers; better known as open universities. Online learning environment affords a much more flexible learning environment that is a better fit for the demands of an adult learner. Nevertheless, the extent of 'openness' in education institutions is unique to its environment and socio-economic conditions. For OUM, a shift towards an environment that is predominantly supported by online learning is a natural move. Any adult returning to the education world will need to adapt to a new learning environment whether it is online or conventional. As such efforts are needed to increase our understanding of ODL learners. Continuous effort towards improving the curriculum to support successful development of self-directed and resilient learners who can successfully acquire the targeted programme outcomes amidst various life demands is crucial. This study reports OUM's continuous effort in understanding its learners better, and in supporting their learning efforts for successful completion of the programme they have enrolled in.

## **LITERATURE REVIEW**

Certain traits and characteristics have shown to have positive influence in the productivity of a person. One of the widely used model in identifying personality dimensions of human being is the 1985 Big Five Personality Traits by psychologists, Costa and McCrae (1987) is referred in this study. Rothmann and Coetzer (2003) reported the relationship between the Big Five Personality Traits and Job Performance. In addition to commercial adoption of the model by companies, studies have shown how the five dimensions introduced in the model can be used to predict several dimensions from academic performance, job performance to life satisfaction (Lounsbury, Saudargas, Gibson and Leong, 2005). The five dimensions described by Costa and McCrae (1987) are: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neurotism. According to Costa and McCrae (1992), the representation of basic dimensions of personality using the five factors were carried out based on four lines of reasoning and evidence. The work by McCrae and Costa (2004) shows the relevance of the dimensions today while the items are improved or amended to suit the need of the study.

In addition to the dimensions derived from the big five model, the study would need to explore additional dimensions that could serve as important indicators for the performance of an adult learner. According to Zimmerman (2000), decades of research have validated self-efficacy as a predictor in learners' motivation and learning. The study also provided the reasoning for inclusion of self-efficacy as dimension despite its correlation to other factors such as motivation. The study also explored the connection to self-regulated learning. Self-regulated learning or self-directed learning is a facet of autonomous learning (Ponton and Rhea, 2006). This facet is found to be associated with the personality trait Conscientiousness (Rothmann and Coetzer, 2003). Nevertheless, there is a necessity to explore this facet as an additional dimension within the education environment of an adult learner. According to Cercone (2008), adult learners are autonomous, independent, self-reliant and self-directed toward goals. Autonomous learners are learners who are independent in their learning process. They possess the motivation and the critical intelligence required for independent acquisition of knowledge and skills.

Finally, this study also incorporates two additional dimensions: attitude and motivation. Learners' behaviour and attitude are a reflection of the learner's motivation and belief. Attitude refers to the individuals' positive or negative assessments on targeted subject (Kallas, 2019). Attitude is defined as a learned predisposition to respond in a certain manner with respect to certain objectivity such as work or learning. The word learned here suggests that attitude can change. Attitude has three components: Cognitive, Affective and Behaviour. Actual behaviour of a person may or may not be aligned with the

attitude they behave concerning a subject. Behaviour can also be influenced by motivation. Motivation refers to the need to act towards an objective, which act as an indicator of how hard individual is willing to try to behave in a specific manner to achieve the objective (Lanero et al., 2011). Motivation in an individual can originate from various kinds of needs including achievement, power and affiliation. The needs for achievement and power are forms of intrinsic motivations, while the need for affiliation is a form of extrinsic motivation. Need for Achievement as theorised by Atkinson (1964) influences both performance and persistence of an individual in an endeavour; and is satisfied by an intrinsic sense of success and excellence. The need for power whether at a personal level or institutional is not directly related to learning. However, the need for power could be a source of motivation if the goal of learning is to gain career advancement.

A total of nine dimensions are explored in this study includes: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism, Self-Efficacy, Self-Directedness, Attitudes towards Education, and Motivations towards Achievement. These dimensions are explored against a selected competency. Competency refers to the ability or the skill to do something successfully or effectively. At OUM, adult learners who successfully graduated from any programme accredited by MQA is expected to have acquired the programme learning outcomes outlined under eight specific domains: (i) Knowledge; (ii) Practical Skills; (iii) Social Skills and Responsibilities; (iv) Values, Attitude and Professionalism; (v) Communication, Leadership and Team Skills; (vi) Problem Solving and Scientific Skills; (vii) Information Management and Lifelong Learning Skills; and (viii) Managerial and Entrepreneurial Skills (MQA, 2010). Knowledge, practical skills, problem solving and scientific skills specific to type of the programme a learner is enrolled are measured using well-designed assessment methods in each course. Learners in the OUM programmes were also enrolled in generic courses: (i) Professional Ethics, (ii) Introduction to Communication (iii) Learning Skills for Open and Distance Learners, Basic Concept of Information Technology, (iv) Principles of Management, (v) Entrepreneurship, and (vi) Thinking Skills and Problem Solving. These courses are focused on the development of four of the domains: ((i) Values, Attitude and Professionalism; (ii) Communication, Leadership and Team skills; and (iii) Information Management and Lifelong Learning Skills; (iv) Managerial and Entrepreneurial Skills. In order to have a complete coverage of the measurement of the expected programme learning outcome, social skills and responsibilities facets must be considered. Responsibilities aspect is clearly identified as a facet under conscientiousness and is not a competency. Anyone who shows high degree of conscientiousness can also be considered to be highly responsible

This study describes the first phase of an online measure proposed for assessing the learner profiles and their influence on a selected competency. The specific objective of this study is to measure the extent of perceived personality traits and selected dimensions: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism, Self-Efficacy, Self-Directedness, Attitudes towards Education, and Motivations towards Achievement, influences Social Competency.

## **METHODOLOGY**

The research uses a survey instrument which was developed based on literature review of articles related to learner profiling. The questionnaire comprises of two parts: Part I and Part II. Part I consists 5 items: Learner's Identity Number, Cluster, Reasons, Barriers and Expected Outcomes associated with their study at OUM. The last three items are also supported by open-ended responses. Part II consists of 60 items grouped under ten dimensions/sub-constructs: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism, Self-Efficacy, Self-Directedness, Attitudes towards Education, Motivations towards Achievement and Social competency. Learners were asked to respond to the items using a five-point Likert type scale, 1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; and 5: Strongly agree.

The survey was targeted to all first semester learners of the September 2017 intake (a population of 1919 learners) with a response rate of 70.3%. An announcement containing the link to the Survey Monkey URL was embedded on the Learning Skills for Open and Distance Learners course portal. The selected course is a compulsory course for all first semester learners. Learners were requested to fill up the survey questions. Data cleaning resulted in a total of 1,041 data (54.2%). Another group from the 162 cohort was also selected as respondents for the survey as this group was targeted for the preliminary stage of the study. Total clean responses received from this group was only 278 (12.5%) from its population. This group was included to examine changes in terms of their traits after studying at OUM for four semesters.

Data were analysed using the Statistical Package for Social Sciences (SPSS) Version 22. Descriptive statistics was used to determine whether or not the distribution of learners across the cluster is represented by the sample obtained. Learners' reasons for studying, learning barriers and their expectations in completing their studies are ranked to determine the primary factors. The Likert-scale measures under the studied dimension were also analysed using SPSS. The statistical analysis was extended to include the Pearson correlation.

## RESULTS AND DISCUSSION

Clean data were obtained from 1,041 respondents (54.2% of the population) for this survey. The percentages represented by the learners from Cluster of Education and Social Sciences, Cluster of Business Management, and Cluster of Applied Science were 41.0%, 38.9% and 20.1%. These percentages were a reflective of the ratio of learners in among the clusters. The results presented focused on the findings concerning the main cohort as the findings observed for both cohorts are similar.

The findings highlighting primary reason, barriers and expected outcomes related to the respondents from Cohort 173 are depicted in Table 1, 2 and 3.

Table 1: Primary Reason for Studying at OUM as Selected by Respondents

RANK	Particulars	Percentage (%)
1	Obtain Higher Qualification	39.1
2	Personal Growth	25.5
3	Opportunities for Higher Position and Salary	23.3
4	Be a role model in the family	7.3
5	Others	4.8

Table 2: Barriers Faced by Respondents When Studying at OUM

RANK	Particulars	Percentage (%)
1	Work and/or Family Situations	39.5
2	Learning Skill	21.1
3	Financial Situation	15.6
4	Learning Behaviour	14.6
5	Others	9.2

Table 3: Rewards Expected by Respondents for Completing Their Studies at OUM

<b>RANK</b>	<b>Particulars</b>	<b>Percentage (%)</b>
1	Knowledge and Skills	60.2
2	Job Promotion or Salary Increment	21.3
3	Certificate	11.9
4	Others	6.6

The responses in Table 1 to 3 are also reflective of the positive attitude towards education depicted in Table 4. The attitude towards education construct shows a mean of 4.37 (the highest mean among all the dimensions). Table 4 also depicts the ranking of all nine traits/dimension. The measured competency is not ranked as it is not a personality trait. Similar ranking was also obtained for the 162 cohort. However, the value for Extraversion dimension must be read with caution as many of the items tested are not reflective of the construct based on the factor analysis results. The items will be improved further in the next cycle. OUM learners have shown higher level of motivation, openness to new experience, and conscientiousness. Hence, we can assume that the learners have high level of responsibilities. They have shown moderate level of Agreeableness and Self-directedness. The level of extraversion and self-efficacy are low. In this study the items for the Neurotism dimension are written in positive manner, hence it reflects the Emotional Stability of an individual. This dimension has the lowest score.

Table 4: Learner Profile: Personality Traits and Facets

<b>Constructs</b>	<b>Cohort 173</b>		<b>Ranking</b>
	<b>Mean</b>	<b>Standard Deviation</b>	
Openness to Experience	4.20	0.56	2
Conscientiousness	4.06	0.55	4
Extraversion	3.78	0.61	7
Agreeableness	3.86	0.60	5
Emotional Stability	3.44	0.69	9
Self-efficacy	3.72	0.71	8
Self-directness	3.89	0.61	5
Attitude Towards Education	4.37	0.58	1
Motivation Towards Achievement	4.13	0.61	3
Social Competency	3.96	0.62	N/A

An analysis of the correlation between the social competency dimension and all dimensions evaluated revealed that there is correlation between the social competency and all other factors. All items (n = 1041) showed *p*-values of 0.00 for confidence level less 0.05. However, the correlations found are not strong. Table 5 shows the highest Pearson Correlation values obtained between the items under the tested dimensions. Generally, the Pearson correlation values obtained were above 0.3, except for item 23 under the Agreeableness Dimension, and the items under the Emotional Stability dimension.

Table 5: Pearson Correlations Table

	Item Under Social Competency	Item Under the Tested Dimension	Pearson Correlation
Openness to Experience	60	3	0.445
Conscientiousness	59	12	0.458
Extraversion	56	18	0.539
Agreeableness	59	20	0.552
Emotional Stability	55	25	0.503
Self-efficacy	56	34	0.520
Self-directness	56	42	0.551
Attitude Towards Education	59	47	0.541
Motivation Towards Achievement	55	54	0.547

Table 6 shows a comparison between the data obtained from the Cohort 162 during their first semester (May 2016) to the data obtained during their 4<sup>th</sup> semester (September 2017). The comparison is limited to only four of the dimensions due to the difference in the dimensions studied. The mean values across four dimensions show an increase. The highest increase of 1.03 was observed for the dimension Motivation (Achievement), whereas all three other dimensions that could be compared shows an increment of around 0.7. The increase in the values in terms of motivation and attitude could indicate the positive experience that the learners have had during the first four semesters of their studies. The positive experience could be directly related to their academic performance. This has yet to be explored. The results also showed an increase in term of their traits, Openness to Experience and Conscientiousness. These could be attributed to the meaningful learning experience they have had during the first four semesters.

Table 6: Learner Profile: Personality Traits and Facets

Constructs	Sub-constructs	Cohort 162 (May 2016) (n = 217)		Cohort 162 (Sept 2017) (n = 278)	
		Mean	Standard Deviation	Mean	Standard Deviation
Big Five Traits	Openness to Experience	3.43	0.41	4.18	0.65
	Conscientiousness	3.30	0.41	4.05	0.62
Attitude towards Education		3.59	0.43	4.31	0.70
Motivation	Achievement	3.05	0.48	4.08	0.69

## DISCUSSION

The findings discovered have a few significant relevance to the study of learner profiling. The responses from learners relating to the primary reasons for studying, learning barriers and expected learning outcome support the high mean value obtained for the attitude towards education. The fact that 60% of learners expected knowledge and skills as their primary expected outcome of their learning programme proves that the learners have the right attitude towards learning. A significant number of learners (>20%) are concerned that their present learning skill is a barrier to their learning. This has two consequences. Such concerns among learners reflect their positive attitude towards their learning. Secondly, it identifies the learning support that is needed. Fortunately, OUM have always introduced a course (university's compulsory introductory course) on learning skills which is offered during every learner's first semester.

The lowest mean found for the emotional stability indicates the need and the importance of the e-counselling service that the university offers to its learners. While, the comparison made after four semesters of studying at OUM shows an increase in the mean values of selected dimensions, the university continue to seek ways to improve its curriculum. This is evident by the continuous effort to review the curriculum by the university. The findings from this study also indicate the need to improve learner's self-efficacy. The belief that a learner has about his learning ability would influence his motivation, attitude and learning behaviour. Zimmerman (2000) recognised self-efficacy as an essential motive to learn. He also highlighted the positive influence that self-efficacy have on learner's self-directedness. While, the learners indicated that they have a slightly higher (0.17 difference in mean), the 3.89 value is relatively low compared to other mean values. The diverse nature of adult learners would explain this finding and that in reality not all adult learners are self-directed. The development of self-directed learners has greater implication in achieving the true aim of education of shifting the responsibility of learning to the learner and therefore enabling the learner's capability for lifelong learning. Such learners are expected to self-regulate learning by having the self-discipline, self-initiatives and ability to assess individual academic progress aimed at achieving academic success and excellence. Strategies such as: (i) self-reflection, (ii) personalised learning goals, (iii) self-check, (iv) monitoring of learning process and progress, and others can be useful. Formative assessment that allows learners to assess their own progress and take necessary steps towards achieving their goals is emphasised. OUM has taken steps in this direction by introducing reflective writing as part of the assessment for selected courses. Existing strategies such as scaffolding could help to develop self-reliance and help the learner to become more self-directed (Cercone, 2008). Strategies such as short, directed and concrete tasks designed to enable "learning for the experience" that the learners could relate to (Fidishun, 2000) could also have important outcomes. There is a need to explore further into learning designs.

Ideally, selected programme learning outcomes could directly be linked to the traits. The conscientious trait was identified to have a strong positive influence on the facet of responsibilities (one of the MQA programme outcomes). Similarly, the trait openness to experience could have a positive influence on the expected programme outcomes such as Problem Solving and Scientific Skills. Meanwhile, conscientious traits could also have positive influence on expected programme outcomes such as values, attitude and professionalism, as well as managerial skills. A desired programme outcome could also have positive correlations with more than one personality trait. An example is the finding by McClelland (1976). McClelland indicated that achievement motivation is a characteristic found in people with entrepreneurial competency.

Social competency is a natural ability to learners who displayed traits such as extraversion and agreeableness. Such measure has yet to be verified since the current instrument requires minor improvement. Firstly, the extraversion dimension has to be improved, and there is a need to reduce the items under each construct to enable more concrete relations to be determined using the structural equation modelling.

## CONCLUSION

This paper presented the findings of OUM learner's profile, in terms of the big five personality traits, attitude towards education and achievement oriented motivation. The study suggested that a majority of OUM's new learners were open to new experiences, conscientious, motivated and had positive attitude towards their education. These learners has found to good level of social competency. Learners also showed moderate level of Agreeableness and Self-directedness. Unfortunately, the level of extraversion, self-efficacy and emotional stability are lowest. The correlations found between social competency and all other factors suggest that it is possible to identify factors that are crucial in predicted competencies based of the expected programme outcomes. The aim is to create better understanding of how the university could provide the right support towards the achievement of the expected programme learning outcomes.

## REFERENCES

- Atkinson, J. W. (1964). *An Introduction to Motivation*. Princeton, NJ: Van Nostrand.
- Cercone, K. (2008). Characteristics of Adult Learners with Implications for Online Learning Design. *Assoc. for the Advancement of Computing in Education (ACE) Journal*, 16(2), 137–159.
- Fidishun, D. (2000). Andragogy and Technology: Integrating Adult Learning Theory as we Teach with Technology: 5th Annual Instructional Technology Conference: Extending the Frontiers of Teaching and Learning, Middle Tennessee State University, Proceedings.
- Kallas, E. (2019). Environment-Readiness Entrepreneurship Intention Model: The Case of Estonians and the Russian-Speaking Minority in Estonia. *SAGE Open*, January-March 2019, 1–15. <https://doi.org/10.1177/2158244018821>
- Lanero, A., Vázquez, J. L., Gutiérrez, P., & García, M. P. (2011). The impact of entrepreneurship education in European universities: An intention-based approach analyzed in the Spanish area. *International Review on Public and Nonprofit Marketing*, 8, 111-130. doi:10.1007/s12208-011-0067-8
- Lounsbury, J. W., Saudargas, R. A., Gibson, & Leong F. T. (2005). An Investigation of Broad and Narrow Personality Traits in Relation to General and Domain-Specific Life Satisfaction of College Students. *Research in Higher Education*, 46(6), 707–729. <https://doi.org/10.1007/s11162-004-4140-6>
- Malaysia Qualification Agency. (2010). *Malaysian Qualification Framework*. MQA: Kuala Lumpur.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the Five-Factor Model of Personality Across Instruments and Observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- McCrae, R. R., & Costa, P. T. (1992). Four Ways Five Factors are Basic. *Personality and Individual Differences*, 13(6), 653–665.
- McCrae, R. R., & Costa, P. T. (2004). *A Contemplated Revision of the NEO Five-Factor Inventory*. Pergamon: Personality and Individual Differences.
- McClelland, D. (1976). *Power: The Inner Experience*. New York: Irvington Publications. Personality Assessment Solutions Ltd (2004). Web-Resource (n. d).



- Ponton, M. K., & Rhea, N. E. (2006). Autonomous Learning from a Social Cognitive Perspective. *New Horizons in Adult Education and Human Resource Development*, 20(2), 38–49.
- Rothmann, S., & Coetzer, E. (2003). The Big Five Personality Dimensions and Job Performance. *SA Journal of Industrial Psychology*, 29(1). doi:10.4102/sajip.v29i1.88.
- Zimmerman, B. J. (2000). Self-Efficacy: An Essential Motive to Learn. *Contemporary Educational Psychology*. 25, 82–91.