

Critical Thinking Abilities as Mediator between Big Five Personalities and Job Performance among Assistant Managers in Sabah Oil Palm Plantations Companies: A Conceptual Paper

Mathan Supramaniam, Dr. Toh Pei Sung, Dr. Oscar Dousin
University Malaysia Sabah

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Abstract

There is a shortage of research investigating the link between the Big Five Personalities and Job Performance as mediated by Critical Thinking Abilities among the Assistants Managers of the Oil Palm Plantations Companies in Sabah particularly. Critical Thinking is a vital skill in the workplace. Employers value Assistant Managers who can think critically because it allows them to analyse situations, make informed decisions, solve problems effectively, and adapt to new challenges. Critical Thinking also helps Assistant Managers evaluate information, consider different perspectives, and communicate ideas clearly. Overall, Assistant Managers with strong Critical Thinking Abilities would increase productivity, innovation and career success in the workplace. Therefore, Assistants Managers of the Oil Palm Plantations Companies in Sabah particularly must be a critical thinker whose Critical Thinking Abilities should have been enhanced via various Human Capital Management including Learning, Training and Development to retain them as for strategic succession plan and to sustain company's long-term goals. The aim of the current research is to consider the influence of the Big Five Personalities on Job Performance through Critical Thinking Abilities via Quantitative approach. The 150 respondents are Assistant Managers who are working presently in a major Oil Palm Plantations Companies in Sabah. Data collection via distribution of the questionnaires. This paper proposes the conceptual framework towards the influential of Big Five Personalities on Job Performance mediated by Assistant Managers Critical Thinking Abilities. Assistant Managers' Personalities is proposed to be measured in terms of Openness to Experience (O), Conscientiousness (C), Extraversion (E), Agreeableness (A), Neuroticism (N) while Job Performance that is proposed to be measured by Task Performance and Contextual Performance. Critical Thinking Abilities is proposed to be measured by wide-ranging critical thinking skills viz Analysis, Inference, Evaluation and Reasoning. Overall results (Appendix 1) show, no significant relationships between individual Independent Variables (O, C, E, A, N)

and the Dependent Variable (DV) Job Performance. All hypotheses (H1-H5) regarding the effect on DV were not supported (p -value > 0.05). Significant relationships between some Independent Variables (IV) the Big Five Personalities and the Mediating Variable (MV), Critical Thinking Abilities (CTA). Several hypotheses (H6, H8, H11-H14, H16) regarding the effect on CTA were supported (p -value < 0.05). The model including all IV is significant for both DV and CTA. Hypotheses H11, H12, H13, H14, H15, and H16 all show a significant relationship between the combination of Independent Variables and their respective Dependent Variables. Probably for conclusion, while the individual Independent Variables might not have a strong enough effect on the Job Performance being Dependent Variable (DV) on their own, the combined effect of these variables along with other factors not included in the model is statistically significant for both DV and CTA. For further insights, it would be helpful to see the actual values of the regression weights and beta coefficients. It provides the direction and strength of the individual relationships. In other note, level of work experiences might have some effect to the results as well. It is hoped that the proposed conceptual framework may contribute to the body of knowledge as additional references for scholars. Most importantly, it is hoped that, enable with time all practitioners in various field to identify important factors that most influential Assistant Managers from Gen X, Y and Z to gain motivation on their Big Five Personalities and enhance their Critical Thinking Abilities for high Job Performance in their respective area of responsibilities in the work place.

Keywords: Critical Thinking Abilities, Big Five Personalities, Job Performance, Assistant Manager, Oil Palm Plantations Companies.

Introduction

Critical Thinking Ability is an important and necessary skill because it is required in the workplace (Robert, 2006). Possibly in today's information era, thinking skills are viewed as crucial to cope with a rapid changing world, and Critical Thinking Ability seems to be one of the most important thinking skills (Donald, 2013). Critical Thinking is at 94.3%, conforming it is one of the most important humans met cognitive skills since it plays a crucial role in logical thinking, decision-making and problems solution (Giorgos, 2019) in all occupations that includes Oil Palm Plantations in Sabah undeniably.

To meet the country's long-term needs the basic has to be an all rounded knowledge of oil palm plantation management that includes plant science, soil science, nutrition, crop protection, estate field practices, crop harvest and processing, land surveying, accounting, book keeping, financial management, industrial relations and human resources management, mechanization and engineering and of course total quality management, sustainability and relates aspects including rules and regulations (Pushparajah, 2017). The Assistant Manager of the 20th and 21st century or Gen X, Y and Z will therefore need a much wider area of skills that those of the current generation, in much the same way as the current generation have required more than their predecessors as emphasised by J.E.Duckett (Goldthorpe, 1999) where passage of time requires changes. The emergence of the information age has created great demand for "knowledgeable workers" and "smarter graduates" (Rosna, 2008).

Knowing a person's personalities traits allows us to predict how the person is most likely to act or react in a wide variety of circumstances but often, there is a notable difference how critical thinkers and non-critical thinkers deal with whatever situations confront them (Facione, 2000). Thinking critically means following specific rules of logic, scientific reasoning,

and some general guidelines that are involved. This will mostly be evident in an individual's decision-making abilities. At the same time personality has indirect effect on work-related performance, which leads to the conclusion that mediating variables are the ones that influence job performance rather than personality directly (Nikolaou, 2018) But none of the existing studies had explored the mediating role of Critical Thinking Ability (CTA) in the relationship between Big Five Personalities (BFP) and Job Performance (JP). Therefore, the present study will look into the mediating role between the Big Five Personalities and Job Performance among Assistant Managers (AM) of Oil Palm Plantations Companies (OPPC) in Sabah.

Literature Review

Job Performance

Job Performance is considered the ultimate dependent variable in human resource management (Linda, 2019). Campbell and Wiernik (2015) reviewed job performance as behaviours under workers' control that contribute to organizational goals. Briefly, Task performance (TP) refers to activities that contribute to the organization's technical core either directly by implementing a part of its technological process, or indirectly by providing it with needed materials or services (Nikolaou, 2018). The indicators of TP are completing job task, work quantity, work quality, job skills, job knowledge, keeping knowledge up to date, working accurately and neatly, planning, and organising, admiration, decision making, solving problems, oral and written communicating and controlling resources.

Task Performance which refers to the behaviours that contribute to the production of a good or the provision of a services vary across jobs likely to be role-prescribed and that are usually included in the job functions (Linda, 2019). Contextual performance (CP) refers to activities that shape the context in which task performance occurs in a social and psychological way (Nikolaou, 2018).

CP indicators are extra tasks, effort, initiative, enthusiasm, attention to duty, resourcefulness, industriousness, persistence, motivation, dedication, proactivity, creativity, cooperating with and helping others, politeness, effective communication, interpersonal relations, organizational commitment (Linda, 2011). Contextual Performance refers as behaviours that contributes to the goals of the organization by contributing to its social and psychological environment also includes task beyond job duties, initiative, proactive, cooperating with others, or enthusiasm (Linda, 2019).

The Big Five Personalities

A personality trait is a specific pattern of thought, thinking, or performing that manages to be faithful over time and beyond essential places includes Oil Palm Plantations Companies. The Big Five Personalities Namely Openness to Experiences, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Common acronyms are OCEAN, NEOAC or CANOE (Irina, 2013). Previous research revealed a growing interest in defining the personality and behaviours of people in field such a career development which is also in line with present study for an Assistant Manager's being successor of Oil Palm Plantation Companies (Manisha, 2020).

Openness to Experience (O)

Openness to experience is defined as imagination, creativity, unconventionality, and a broad range of interest (Salgado, 2004). Singh (2018) concluded that people with high openness are individualistic, and more self-determined towards growth and such categories of people could be of creative designers, scientist.

Sing (2018) also in opinion that people with low openness are drawn towards convention and details – these of whom who would make good accountants, office workers, or police officers. People who score high on Openness to Experience (also called Openness, culture, or Intellect) are usually artistic, curious, imaginative, and original; and have wide interests, sensitivity to aesthetic experiences and fantasy, and a rich emotional life. People low in Openness have a narrower set of interests and are more conventional in their outlook and behaviour; they are closed to new ideas and experience their emotions less intensely (Irina, 2013).

Conscientiousness (C)

It describes a person who is meticulous, self-disciplined, hardworking, and competent (Singh, 2018). With high conscientiousness, we see an overlay with the previous low openness, for such people possess characteristics that make them excellent office workers, managers, accountants, and teachers.

We can posit that such people are responsible, prim and proper. They will put more effort into their appearance than suppose those of low conscientiousness, whom we know are messy and work at their own pace (Singh, 2018). Career Research (2016) stated that a person of low conscientiousness shares a low openness, people are diverse so such a person could be more technical or hands-on. Again, we can see an embodiment of engineers, craftsmen, technicians, security analyst, and so on.

Otherwise, a person who embodies high openness with low conscientiousness would be of artisans, writers, and self-start entrepreneurs who work with their own time (Singh, 2018). Persons who have high score on conscientiousness strive to achieve high standards and are self-disciplined, orderly, deliberate, responsible, thorough, and dutiful. Low-conscientiousness persons rarely plan; they may be careless and disorganized in personal matters, and often fail to establish a well-defined set of life goals (Irina, 2013). Barrick, Mount, and Strauss (1993) tested and found support for a model where overall performance was predicted by conscientiousness which exerted its influence through goal settings (Viswesvaran, 2000).

Extraversion (E)

Extraversion is defined by sociability, dominance, gregariousness, ambition, and positive affectivity (Salgado, 2004). Barrick & Mount (199) and Career Research (2016) agreed that those with high extraversion could easily tend to management, to be event organisers and the like. They can spur people into action and influence them. Those with low extraversion could be cerebral, more incline to duties behind the scenes (Singh, 2018). Highly extraverted (or Surgency) people are warm, talkative, assertive, active and energetic, cheerful, and high in positive affect; they generally like to be around others and prefer stimulating environments. Introverted people, in contrast, like to be alone or with a few close friends; they are reserved and serious, value their independence, and prefer quiet environments (Irina, 2013). It was found that extraversion is a valid predictor of performance in jobs characterised by social interaction, such as sales personnel and managers (Rothmann, 2003).

Extraversion can be categorized as a positive emotion of personality (Bakker et al., 2002) because individual that have a high in extraversion tend to be self-confident, dominant, active and excitement seeking. For example, when actions that reflect high levels of extraversion or agreeableness are the most effective responses to difficult interpersonal and social challenges, people high on these traits should be more likely to learn this (Motowidlo, 1997). Employee higher in extraversion are less likely to experience anger (Jensen-Campell et al., 2006) (Intan, 2013). As such, this study assumes that Assistant Managers that high in extraversion personality criterion is more likely to demonstrate likely score high in his job performance that would influence by Critical Thinking Ability as well.

Agreeableness (A)

Agreeableness consists of cooperativeness, kindness, compliance, and affability (Salgado, 2004). Agreeableness likewise asserts a person who is altruistic, conflict-avoidant, and conforming. As such we can see positions as agreed by Ozer & Benet-Martinez (2006), such as teachers, nurses, or social relations for such people. Those with low agreeableness would do well in autonomous positions or creative fields like those with high openness (Singh, 2018). People with high Agreeableness are altruistic, cooperative, compassionate, appreciative, forgiving, generous, kind, sympathetic, and trust the good intentions of others. Disagreeable people, in contrast, tend to be characterized by antagonism, scepticism, and a competitive rather than cooperative approach to life (Irina, 2013). An agreeable person is fundamentally altruistic, sympathetic to others and eager to help them, and in return believes that others will be equally helpful (Rothmann, 2003). The disagreeable/antagonistic person is egocentric, sceptical of others' intentions, and competitive rather than co-operative. According to Tett et al (1991), Agreeableness is a significant predictor of job performance. Salgado (1997) found that Agreeableness is related to training success. The co-operative nature of agreeable individuals may lead to success in occupants where teamwork and customer service are relevant (Rothmann, 2003).

Neuroticism (N)

Neuroticism is a dimension of normal personality indicating the general tendency to experience negative effects such as fear, sadness, embarrassment, anger, guilt, and disgust (Rothmann, 2003). According to Ackerman (2017), Neuroticism would defer people with intense melancholic emotions that may be sensitive, with a study proposing they are easily affected by the environment. They may do well in fields relating to theatre or the arts, wherever they may direct their deep emotions to. Those with low neuroticism have a much stable emotional wavelength, fairly remaining in control, suiting those careers where one is needed to stay calm in a fast, reactive, and difficult situation (Singh, 2018).

People who score high on Neuroticism are emotionally sensitive; they become upset easily and frequently experience negative emotions. This pole of Neuroticism also includes sadness, anger, anxiety, worry, self-consciousness, vulnerability to stress, and a tendency to act impulsively.

People who score low on Neuroticism are calm and emotionally stable (the N factor is sometimes referred to by its low pole- "Emotional Stability"). Even under stressful conditions, low – N people remain confident and experience few negative emotions (Irina, 2013). Emotional Stability typically consists of low anxiety, control, personal security, and absence

of depression vs. anxiety, somatic complaints, feeling of insecurity, and hostility (Salgado, 2004).

Critical Thinking Abilities

Present-day definitions of critical thinking are just extensions of early version by pioneer researchers. Critical Thinking is defined as reasonable reflective thinking that is focused on deciding what to believe and do and, on some level, includes the correct assessing of statements and by implication, we might add, actions and beliefs (Ennis, 2011). The philosophical perspective focuses on hypothetical qualities and characteristics of the individual, rather than his/her actual behaviours to perform what he/she think (Bailin et al., 1999; Facione, 1990).

Approach Definition of “Critical Thinking” Philosophical Perspective are “the skill and propensity to engage in an activity with reflective skepticism” (McPeck, 1981, p.8); “the analysis of good reasons for belief, understanding the various kinds of reason involves understanding complex meanings of field-dependent concepts and evidence” (McPeck, 1981, p.24); “disciplined thinking that is clear, rational, open-minded, and informed by evidence” (Halpern, 1998) and “aimed at forming a judgment,” where the thinking itself meets standards of adequacy and accuracy (Bailin et al, 1999, p.287) (Ching, 2014). The cognitive psychological perspective focuses on how people think or how they could think under hypothetical ideal conditions, and encompasses behaviours demonstrated during thinking (Halpern, 1998; Sternberg, 1986; Willingham, 2007). Cognitive Psychological Perspective are “the mental processes, strategies, and representations people use to solve problem, make decisions, and learn new concepts” (Sternberg, 1986, p.3); “reasonable reflective thinking focused on deciding what to believe in or do, and provides a set of criteria for assessing it ” (Ennis, 2002); “the use of those cognitive skills or strategies that increase the probability of a desirable outcome” (Halpern, 1998, p.450). “Seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problem, and so forth” (Willingham, 2007, p.8) (Ching, 2014). The educational perspective stresses instructional applications of critical thinking in classroom practices as well as the real-world interactions (Kennedy et al, 1991). For example, the highest levels of Bloom’s hierarchical taxonomy, analysis, synthesis, and evaluation, are commonly used to define what critical thinking is and how it functions in learning environments.

Educational Perspective further are “the ways of analysing, synthesizing and evaluating information during the learning process” (Anderson et al, 2001, p. 24); “the learning process of actively and skilfully conceptualizing, applying, analysing, synthesizing, and evaluating information to reach an answer or conclusion” (Kennedy et al., 1991, p. 13).

Conceptual Framework for Critical Thinking Abilities as Mediator in between the Big Five Personalities and Job Performance.

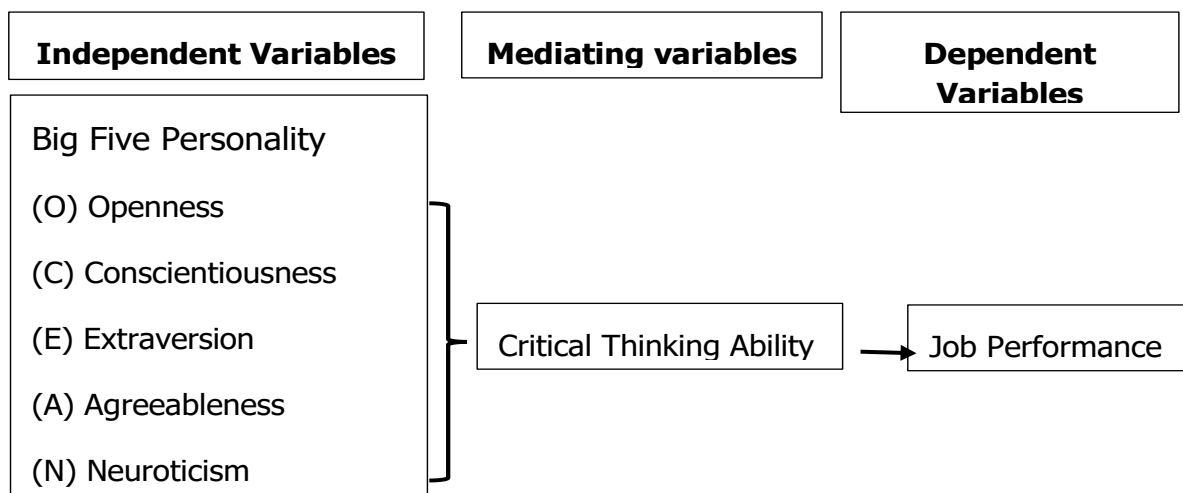


Figure 1.0: The Proposed Conceptual Framework

Discussion and Conclusion

Overall, no significant relationships between individual independent variables (O, C, E, A, N) and the first dependent variable (DV). All hypotheses (H1-H5) regarding the effect on DV were not supported (p -value > 0.05). Details are as per Appendix 1 for brief findings and analysis.

- **Hypotheses:** These represent the predictions about the relationships between variables (e.g., H1: O has a positive effect on DV).
- **Regression Weights:** These values indicate the strength and direction of the linear relationship between an independent variable and the dependent variable.
- **Beta Coefficients:** These coefficients represent the strength of the relationship between an independent variable and the dependent variable, accounting for the influence of other independent variables.
- **Adjusted R²:** This value indicates the proportion of variance in the dependent variable explained by the independent variables after considering the number of independent variables included in the model.
- **F:** This statistic is used to test the overall significance of the model (i.e., whether all the independent variables together have a statistically significant effect on the dependent variable).
- **P-value:** This value indicates the probability of observing the F-statistic by chance. A low p -value (typically < 0.05) suggests that the model is statistically significant.
- **Hypotheses Supported:** This column indicates whether the hypothesis was supported based on the statistical tests.

Significant relationships between some independent variables and the second dependent variable (CTA). Several hypotheses (H6, H8, H11-H14, H16) regarding the effect on CTA were supported (p -value < 0.05).

The model including all independent variables is significant for both dependent variables (DV & CTA). Hypotheses H11, H12, H13, H14, H15, and H16 all show a significant relationship between the combination of independent variables and their respective dependent variables. Probably for conclusion, while the individual independent variables might not have a strong enough effect on the 1st dependent variable (DV) on their own, the combined effect of these

variables along with other factors not included in the model is statistically significant for both DV and CTA.

For further insights, it would be helpful to see the actual values of the regression weights and beta coefficients. It provides the direction and strength of the individual relationships. In other note, level of work experiences might have some effect to the results as well.

The present study conceptually proposed the Critical Thinking Abilities as mediator measuring wide-ranging critical thinking skills viz Analysis, Inference, Evaluation and Reasoning between the Big Five Personalities that includes OCEAN influencing Job Performance among Assistant Managers in Sabah Oil Palm Plantations Companies. The proposed variables influence industry practitioners in considering human capital management via learning, training and development as strategies to enhance Critical Thinking Abilities while improving the Assistant Managers' Personalities that contribute to their High Job Performance required in this 21st century to maintain competitive advantage. Millennials generation is unique in many ways including 3 core variables being researched. Therefore, future researchers are urged to carry out an empirical study by using the proposed framework for current 21st and future 22nd century generation of Assistant Managers probably not limited to Oil Palm Plantation Companies but also other industries.

Appendix 1

| Hypotheses | Regression Weights | Beta Coefficients | Adjusted R ² | F | P – value | Hypotheses Supported |
|------------|---------------------------|-------------------|-------------------------|---------------|---------------|----------------------|
| H1 | O vs DV | 0.118 | 0.002 | 1.350 | 0.247 | NO |
| H2 | C vs DV | 0.060 | -0.003 | 0.528 | 0.469 | NO |
| H3 | E vs DV | 0.118 | 0.007 | 2.083 | 0.151 | NO |
| H4 | A vs DV | -0.091 | 0.002 | 1.229 | 0.269 | NO |
| H5 | N vs DV | -0.112 | 0.006 | 1.897 | 0.171 | NO |
| H6 | O vs CTA | 0.191 | 0.030 | 5.619 | 0.019* | YES |
| H7 | C vs CTA | 0.034 | -0.006 | 0.171 | 0.680 | NO |
| H8 | E vs CTA | 0.217 | 0.040 | 7.282 | 0.008* | YES |
| H9 | A vs CTA | 0.016 | -0.007 | 0.038 | 0.846 | NO |
| H10 | N vs CTA | 0.082 | 0.000 | 0.995 | 0.320 | NO |
| H11 | IV & DV vs CTA | | 0.220 | 22.035 | 0.000* | YES |
| | DV vs CTA | 0.454 | | | 0.000* | YES |
| | IV vs CTA | 0.151 | | | 0.039* | YES |
| H12 | O & DV vs CTA | | 0.219 | 21.95 | 0.000* | YES |
| | O vs CTA | 0.149 | | | 0.042* | YES |
| | DV vs CTA | 0.442 | | | 0.000* | YES |
| H13 | C & DV vs CTA | | 0.197 | 19.295 | 0.000* | YES |
| | C vs CTA | 0.456 | | | 0.093 | NO |
| | DV vs CTA | 0.007 | | | 0.000* | YES |
| H14 | E & DV vs CTA | | 0.224 | 22.55 | 0.000* | YES |
| | E vs CTA | 0.165 | | | 0.024* | YES |
| | DV vs CTA | 0.436 | | | 0.000* | YES |
| H15 | A & DV vs CTA | | 0.200 | 19.680 | 0.000* | YES |
| | A vs CTA | 0.058 | | | 0.433 | NO |
| | DV vs CTA | 0.461 | | | 0.000* | YES |
| H16 | N & DV vs CTA | | 0.215 | 21.438 | 0.000* | YES |
| | N vs CTA | 0.134 | | | 0.067 | NO |
| | DV vs CTA | 0.471 | | | 0.000* | YES |

*Correlation is significant at the 0.05 level (2 – tailed).

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