

# Integrated Personality Profiling Framework Using Traits and Factors Theory for Malaysian HLI Enrolment: A New Approach

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**Abstract**—Personality profiling is important especially in education and human resource management. Inability to identify individuals' personality may cause misunderstanding of ones potential; and further more, he/she might fail to recognize his/her own career or academic direction. This study aimed to develop an integrated personality framework; using Trait and Factor Theory of Occupational Choice. The completed framework was used as the core concept of integrated profiling instrument, named as Integrated Personality Profiling (i-PRO). The main beneficiary of the completed (i-PRO) will be students, academics and non-academic personnel. The sample for this initial study was 380 students from one Higher Learning Institution (HLI) in Malaysia. The sampling method used was random sampling. The study was done to explore the Holland's 3-code interest traits among engineering students of the said HLI. One of the developed domain used in this initial study was career interest domain. The Holland's 3-code typologies for Higher Learning Institution (HLI) respondents are Investigative, Social and Realistic (I, S, R).

**Keywords**—*profiling, integrated personality, person-environment fit*

## I. INTRODUCTION

Personality profiling is a process to systematically record and analyse ones personality. This process is crucial as by understanding ones personality traits, he/she

would be able to understand what may influence his/her professional, personal and social life behaviors. Any incongruency between traits and work/academic environment may affect academic and work performance.

In the era of Industry Revolution 4.0 (IR 4.0) and Internet of Things (IoT), the new working challenge may need to predict the suitable personality characteristic for recruitment and staff placement. The process of getting a right people for the right career may start at an earlier stage; whereby an individual starts choosing his/her right academic programs or college major.

Therefore, this study aimed to develop an integrated personality profiling framework using Trait and Factor Theory of Occupational Choice. Based on the finalized framework, an instrument was developed named as Integrated Personality Profiling (i-PRO). The main beneficiary of the instrument will be students, academics and non-academic personnel. As for students, they are also need to equip themselves with the adequate skills towards future changes [1].

## II. ORGANIZATION SCENARIO

Personality profiling in organization is a very useful tools in distinguishing personalities, traits, characteristics, strengths and weaknesses of each organization member. No two people are alike, not even twins. Hence, personality profiling is an essential approach in the selection of personnel, professional development and coaching.

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Currently there is no existing integrated framework available in understanding individual traits. This might happen as a result of mismatch between people and work place, lack of strategic for staff succession plan, and lack of information for staff development training needs. These are the core issues of this study. The main questions arise by this scenario are; 1) what are the considerable personality domains for selection, placement, and academic programs choice? 2) what are the Holland's 3-code academic interest of studied HLI? In addressing these issues, two objectives were developed and investigated.

A. *Objectives*

1. To identify the personality domains that influence selection, placement, and academic program choice.
2. To identify the Holland's 3-code academic interest.

B. *Literature review*

The importance of profiling personality can be observed especially in education [1], [2], [3], [4] and human resource management [5], [6]. Literatures have shown that personality characteristics play an important role in influencing individual's academic and work performances.

The complexity of IR 4.0 work environment will require individual to have more understanding of one's personality traits. Frank Parsons's Trait and Factor Theory of Occupational Choice becomes a relevant approach in helping one to understand towards his/her career interest [7]. There are 3-stage approach of Parsons's Trait and Factor; 1) understanding of their individual traits (aptitudes, interests, personal abilities);

2) a knowledge of jobs and the labor market; 3) rational and objective judgment about the relationship between their individual traits, and the labor market. These are the salient procedures for matching individual towards their working environment or academic programs. The trait and the factor theory operates under the premise that it is possible to measure both individual talents and the attributes required in particular jobs. It also assumes that a good fit is when people and environment are matched.

In the nutshell, Frank Parsons's Trait and Factor Theory of Occupational Choice becomes the most relevant foundation for the purpose of developing the integrated personality profiling framework.

### III. METHODOLOGY

This study started by gathering data related to individual, working environment and academic program characteristics towards finalizing the framework. The method used was focus group interview. Afterwards, from the finding of focus group interview, the researchers will be able to have the direction for development of the personality instruments. Data gathered from the instrument was analyzed using the Environmental Assessment Technique (EAT) to describe the academic interest of the respondents.

### IV. FINDINGS

#### The Personality Domains Framework

The concept of the proposed instruments has embedded various domains as shown in Fig. 1. below. It covers combination of personality traits and the HLI working environment domains.

## CONCEPTUAL FRAMEWORK

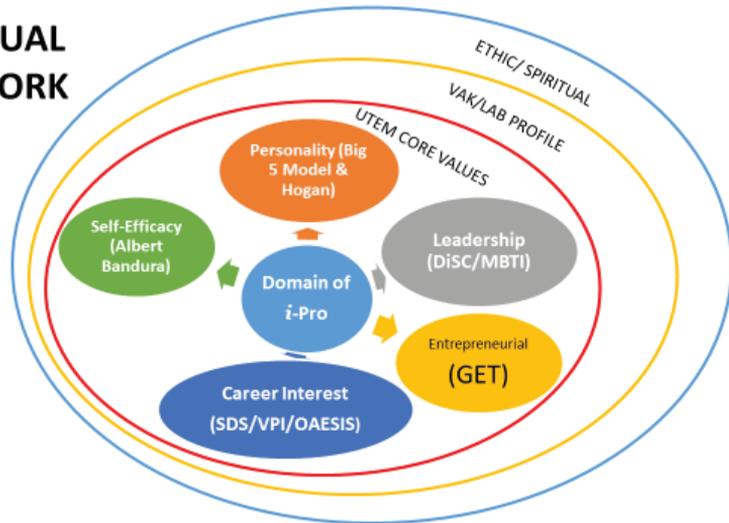


Fig. 1. Personality Domain Framework

Domains of the the developed framework covers 3 aspects. Three main domains are; 1) Core Values; 2) Personality; and 3) Competency. These three main domains comprise of sub-

domains as shown in Table 1. The domains were established from the findings of focus group interview of various stakeholder in the studied intitution.

TABLE I PERSONALITY DOMAINS

MAIN DOMAINS	CORE VALUES	PERSONALITY	COMPETENCY
SUB DOMAINS	<ol style="list-style-type: none"> <li>1. Readiness for change</li> <li>2. Resilience</li> <li>3. Loyalty</li> <li>4. Integrity</li> <li>5. Professionalism</li> </ol>	<ol style="list-style-type: none"> <li>1. Self Orentation</li> <li>2. Career Orientation</li> <li>3. Emotional Stability</li> <li>4. Cognitive Self</li> <li>5. Self Representation</li> <li>6. Leadership</li> </ol>	<ol style="list-style-type: none"> <li>1. Entrepreneurial</li> <li>2. Ethics &amp; Spiritual</li> <li>3. Interpersonal</li> <li>4. Intuition</li> <li>5. National Identity</li> </ol>

### A. Core Values Domain

This domain consists of five sub-domains which are; 1) readiness for change, 2) resilience, 3) loyalty, 4) integrity, and 5) Professionalism. Every sub-domain contains 15 items which focus on the standard values supposedly internalize by all members of the studied HLI.

### B. Personality Domain

This domain consists of six sub-domains namely; 1) self orientation, 2) career orientation, 3) emotional stability, 4) cognitive self, 5) self representation, and 6) leadership. Every sub-domain contains various number of item in the range between 30 to 192 items. The analysis of every sub-domain describe the personality

orientation of a person.

### C. Competency Domain

This domain covers five sub-domains named as; 1) entrepreneurial, 2) ethics & spiritual, 3) interpersonal, 4) intuition, and 5) national identity. All sub-domains have 15 items, and they focus on the self-competency level of a person.

The uniqueness of this framework is, it integrate 16 aspects of personality and characteristic.

### Academic Interest Code Clasification Profile

The mean score for every personality type based on area of specialization in studied HLI are obtained by using descriptive methods specifically the Environmental Assessment

Technique (EAT). By using the three highest mean scores, Holland's 3-code interest for the respondents of studied institution has been determined. These codes presented the personality profiles of the respondents for their

major academic program. Based on Table 2, the 3 types of personality with the highest mean scores for the studied HLI are I (4.42), S (4.16) and followed by R (4.02). In short, the Holland 3-code of career interest for this sample are ISR.

TABLE II STUDENT'S PERSONALITY PROFILE

R	I	A	S	E	C	Holland's 3-code Typology
4.02	4.42	2.23	4.16	3.08	2.81	ISR

## V. CONCLUSION

Profiling domains in the study was adapted from various instruments such as Holland Person-Environment Fit, Hogan Personality, and Myer-Briggs Type Indicator. Beside that, the Frank Parsons's Trait and Factor was adapted as the main theory. This framework embed the organization core values, its 10 years strategic plan and the Malaysian Higher Education Blueprint. All these values have been integrated as a fundamental domain of the instrument. In other words, it is crucial to embed those aspects tailored to need of the the organization [8].

The final outcome of this developed framework is the core concept of the integrated profiling instrument. It showed that the Holland's 3-code was Investigative, Social and Realistic (ISR). These results are different from previous study by Abdullah et al. (2006) on KUTKM engineering undergraduate students. They found Holland's 3-code interest were RSI [7]. Although there's a different between these two studies, the findings are consistent conceptually as stated in Holland's theory [9]; as the difference is only on the arrangement of the codes. One of the reasons the differences occurred was probably because of the moderator effect of various courses taken by those students as elective courses in their study period.

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