# A Comparative Study on Self-Awareness and Self Motivation of Technology and Engineering Undergraduates

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#### **Abstract**

This research was made to find out the relationship between self-awareness and self motivation of Technology and Engineering undergraduates of South Eastern University. Hundred and twenty (120) undergraduates were selected using simple random sampling from second year students of Faculty of Technology and Engineering of South Eastern University of Sri Lanka. The tools for self-awareness and self motivation were extracted from the Emotional Intelligent Scales developed by Anukool Hyde, Sanjyot Dethe and Upinder Dhar, (2002) to find out the level of self-awareness and self-motivation of undergraduate students. The personal data schedule designed by the investigator was used to obtain relevant socio-demographic information. All scales were pretested through a pilot study to ensure the reliability and validity prior to the final investigation. The samples were communicated by the researcher and data were acquired through questionnaire. The main objectives of this research were to find out the relationship between self-awareness and self-motivation of Technology students and the difference of self-awareness and self-motivation basis on gender. 't'-test and correlation were used for the statistical analysis. The result revealed that there is a positive significant relationship between self-awareness and self-motivation. However difference among demographic variables, faculty of study and gender are statistically not significant.

**Keywords:** Self-Awareness, Self-Motivation, Self-consciousness, Self-efficacy & Emotional Intelligence

# 1. Introduction

Every human being is identified in this society with his/her social status which is built up by one's own. However, before we create the social identity, we should know who we are. That means we should be aware of ourselves. Hence self-awareness means knowing one's emotions, recognizing feelings as they occur and discriminating between them is being emotionally literate. The ability to monitor feelings from moment to moment is crucial to psychological insight and self-understanding. People with greater certainty about their feelings are better pilots of their lives, having a surer sense of how they really feel about personal decision. Hence it is said that the ability to make intelligent decisions using a healthy balance of emotions and reason, (Goleman, 1995). It is about learning to better understand of oneself. It's impossible to change and accepting if you are unsure as to who we are. Having clarity about who we are and what we want can be empowering, giving the confidence to make changes.

Self-awareness is also the ability to focus on one-self and how the actions, thoughts, or emotions do or don't align with the internal standards. People with high emotional intelligence are usually of this very self-aware. They understand their emotions, and because of this, they don't let their feelings rule them.

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They're confident because they trust their intuition and don't let their emotions get out of control. They're also willing to take an honest look at themselves. They know their strengths and weaknesses, and they work on these areas so they can perform better. This self-awareness is the most important part of emotional intelligence. And self-awareness is important because when we have a better understanding of ourselves, we realize ourselves as unique individuals. This enables us to empower to make changes and to build on our strength as well as to eliminate our weakness and it is identified as first step to goal setting.

Similarly self-motivation means how one can find the ability to do what needs to be done without influence from other people or situations. Self-motivation is encouraging oneself to continue making progress toward a goal even when it feels challenging. Four factors are necessary to build the strongest levels of self-motivation, that are self-confidence and self-efficacy, positive thinking, focus and strong goals and a motivating environment, Goleman, (1995) identified four elements that make up motivation:

1. Personal drive to achieve, the desire to improve or to meet certain standards 2. Commitment to personal or organizational goals 3. Initiative, which he defined as 'readiness to act on opportunities'; and 4. Optimism, the ability to keep going and pursue goals in the face of setbacks. This is also known as resilience. People can be motivated by many things, both internal and external. Therefore it is obvious that self-awareness and self-motivation are very important psychological variables to be studied comprehensively.

#### 2. Review of Literature

Self-awareness theory developed by Duval and Wicklund in their 1972 landmark book a theory of objective self awareness, states that when we focus our attention on ourselves, we evaluate and compare our current behavior to our internal standards and values. This elicits a state of objective self-awareness. We become self-conscious as objective evaluators of ourselves, (Duval et al., 1972) However self-awareness is not to be confused with self-consciousness, (Cohen, & Anthony, 2002). Various emotional states are intensified by self-awareness. However, some people may seek to increase their self-awareness through these outlets. People are more likely to align their behavior with their standards when made self-aware.

Moreover, a series of recent studies showed that self-awareness about cognitive processes participates in general intelligence on a par with processing efficiency functions, such as working memory, processing speed, and reasoning, (Demetriou, Andreas et al., 2006). Albert Bandura's theory of self-efficacy builds on our varying degrees of self-awareness. It is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations.

In adolescent development, self-awareness also has a more complex emotional context due to the maturity of adolescents compared to those in the early childhood phase, and these elements can include but are not limited to self-image, self-concept, and self-consciousness along many other traits that can relate to level of self awareness, however it is still a distinct concept within its own previous definition. Social interactions mainly separate the element of self-awareness in adolescent rather than in childhood, as well as further developed emotional recognition skills in adolescents. There is a mature sense of self-awareness with students who were aged 17, which in term provides a clear structure with how elements like self-concept, self-image, and self-consciousness relate to self-awareness, (Sandu et al., 2015).

Self-motivation is, in its simplest form, the force that drives you to do things. People can be motivated by many things, both internal and external, such as desire to do something, love of someone, or need for money. Usually, motivation is a result of several factors. The ability to motivate yourself, self-motivation

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is an important skill. Self-motivation drives people to keep going even in the face of set-backs, to take up opportunities, and to show commitment to what they want to achieve. Marshaling emotion in the service of a goal is essentially for paying attention, for self-motivation and mastery and for creativity. People who have this skill tend to be more highly productive and effective in whatever they undertake (Goleman, 1995).

The students with less self-motivation, more attention seeking behaviors and more distraction should be dealt with extra care and consideration, so that their emotional, cognitive and empathic needs are fulfilled, (Alt, 2015; Bernardino et al., 2018). In essence, self-motivation plays an important role in knowledge acquisition, yet many intrinsic and extrinsic factors influence the motivation level of individual. To minimize the negative influence of some of these factors on students' self-motivation is important to enhance learning and care practices among nursing students, (Nasrin Soroor, & Soodabeh, 2012; Nilsson & Stomberg, 2008; Williams & Williams, 2011; Zimmerman, Bandura, & Martinez-Pons, 1992).

Motivation psychology is no stranger to essence explanations. Early theories of motivation posited instincts to explain variability in behavior. McDougall (1908/1960), probably the most famous instincts instinct theorist, inferred instincts from his observations of behavior. People sometimes explore their environments, so he assumed "curiosity instinct." But sometimes people fear new things, so he further assumed a "flight instinct." Different behaviors reflect different motivations; similar behaviors reflect similar motivations. Things that seem different phenotypically are assume to be different genotypically no apparent differences are merely apparent. The notion that apparently-antagonistic behaviors (like curiosity versus anxiety, or approach versus avoidance) might stem from the same set of process was not considered. There are the concepts and dynamics posited by objective self-awareness theory. Self-focused attention can uncover self-standard discrepancies; attributions determine how people deal with the problem and how they feel about the perceived cause; and self-evaluation can sometimes affect attributions. Self-motivation thus rests in the interplay of two systems that that reflect motives for consistent cognitive organization, (Heider, 1960)

Fathima Banu and Neelakandan, (2011) studied the emotional intelligent of college students. In that research it was found that college students do not differ in their Self-awareness and self-motivation on the basis of gender. Similar result was also obtained by Fatt & Howe, (2003). Allem, (2005) studied emotional stability of 100 students of different colleges of New Delhi. Emotional stability questionnaire was administered on 50 male and 50 female students of different colleges. Result shows that male students are found to be more emotionally stable than female students.

# 3. Problem of study

This research is aimed to compare the self-awareness and self-motivation of undergraduate students who are in a position to plan their future career. Every year thousands of graduates pass out from the university. But most of them are identified as unemployed graduates. Even though they have completed their degree they could not find a proper job. This is because they are lack in psychological variables. Emotional Intelligence is one of the psychological variables required to the success of private and professional life. Particularly self-awareness and self-motivation are two important domains of emotional intelligence. Hence it was realized that find out the relationship between self-awareness and self-motivation is vital important. In addition to this finding out the differences basis of gender is also essential.

# 4. Objectives of the study

- 1. To investigate the relationship between self-awareness and Self-motivation of Technology and Engineering undergraduates.
- 2. To compare self-awareness and self-motivation of Technology and Engineering undergraduates.
- 3. To compare self-awareness and self-motivation of male and female Technology undergraduates
- 4. To compare self-awareness and self-motivation of male and female Engineering undergraduates
- 5. To compare self-awareness and self-motivation of male and female undergraduates of Technology and Engineering

# 5. Hypothesis:

- H<sub>1</sub>: There is no significant relationship between self-awareness and Self-motivation of Technology and Engineering undergraduates.
- H<sub>2</sub>: Technology and Engineering undergraduates do not significantly differ in their self-awareness and self-motivation
- H<sub>3</sub>: Technology undergraduates do not significantly differ in their self-awareness and self-motivation on the basis of gender.
- H<sub>4</sub>: Engineering undergraduates do not significantly differ in their self-awareness and self-motivation on the basis of gender.
- H<sub>5</sub>: Technology and Engineering undergraduates do not significantly differ in their self-awareness and self-motivation on the basis of gender

### 6. Methodology

#### 6.1 Sample

Sample population was selected from Faculties of Technology and Engineering of South Eastern University of Sri Lanka where 120 respondents have been drawn for this study using simple random sampling.

### 6.2 Description of material

The scale for Self-awareness and Self-motivation was extracted from Emotional Intelligence Scale developed by Anukool Hyde, Sanjyot Dethe and Upinder Dhar, (2002) which contains 34 statements which explore the ten different dimensions of emotional intelligence. These are self-awareness, empathy, self motivations, emotional stability, managing relation, integrity, self development, value orientation, commitment and altruistic behavior. Self-awareness is measured four statements and Self motivation is measured by six statements. There are five response categories for each item as: I) strongly disagree ii) disagree iii) neutral iv) agree vii) strongly agree. The maximum score for self-awareness is 20 and minimum is 4. The maximum score for self motivation 30 and minimum score is 6.

#### 6.3 Procedure

Before the scale was administered to the undergraduates, permission was taken from them individually. Questionnaires were distributed to the students individually. The clear instructions were given to them regarding the purpose of the test, the method of answering and other conditions before they were allowed to fill up the questionnaires. As per manual of each scale, no time limit was fixed for this test. Then, the undergraduates were instructed to put tick mark on any one of the five alternative response modes to indicate the level of agreement with the particular content of each question for self-awareness and self motivation. After the instructions were given, the students were allowed to fill up the scales and personal information. The duly filled in questionnaires were collected from them. Then the each questionnaire was scored according to the scoring key and tabulated. The standard scores were subjected to 't' and 'correlation' tests in order to test the stated hypotheses.

## 7. Results and Discussion

Table 1. Correlation between self-awareness and self-motivation

Correlation	Value
Correlation between self-awareness and self-motivation	0.337**

\*\*Significant at 0.01 level

The purpose of this analysis is to find out the inter-dependence of each of the two variables on one another. (Table 1) It shows that self-awareness has positive and significant relation with self-motivation at the significant level of 0.01 (0.337). Hence, the stated hypothesis that there is no significant relationship between Self-awareness and self-motivation of Technology and Engineering undergraduates is rejected.

Table: 2. Self-awareness and Self-motivation of Technology and Engineering undergraduates

Variable	Faculties	N	Mean	SD	't'
0.16	75 1 1	60	16.65	2.024	2.040
Self-awareness	Technology  Engineering	60	15.82	2.432	2.040 NS
Self-motivation	Technology	60	23.55	2.521	-0.349
	Engineering	60	23.72	2.706	NS

NS - Not Significant

(Table 2) It shows that self-awareness and self-motivation of technology and engineering undergraduates is not significant even though technology students show higher mean for self-awareness than engineering undergraduates. Hence, the stated hypothesis that Technology and Engineering undergraduates do not significantly differ in their self-awareness and self-motivation is accepted.

Table: 3 Self-awareness and self-motivation of Technology undergraduates in their basis of gender

Variable	Faculty	Gender	N	Mean	SD	't'
		Male	14	16.93	1.141	
self-awareness		Female	46	16.57	2.228	0.585
	Technology					NS

	Male	14	23.50	2.682	
Self-motivation	Female	46	23.57	2.500	-0.084
					NS

NS - Not Significant

It shows that Technology students' self awareness and self-motivation are not significant on the basis of gender. Hence, the stated hypothesis that Technology undergraduates do not significantly differ in their self-awareness and self-motivation on the basis of gender is accepted.

Table: 4. Self-awareness and self-motivation of Engineering undergraduates in their basis of gender

Variable	Faculty	Gender	N	Mean	SD	't'
		Male	44	15.66	2.667	
self-awareness		Female	16	16.25	1.612	-1.038
	Engineering					NS
		Male	44	23.73	2.748	
Self-motivation		Female	16	23.69	2.676	0.050
						NS

NS - Not Significant

It shows that Engineering students' self awareness and self-motivation are not significant on the basis of gender. Hence, the stated hypothesis that Engineering undergraduates do not significantly differ in their self-awareness and self-motivation on the basis of gender is accepted.

**Table: 5.** Self-awareness and self-motivation of all undergraduates (Technology and Engineering) in their basis of gender

Variable	Gender	N	Mean	SD	't'
		58	15.97	2.442	
self-awareness	Male				-1.255
		62	16.48	2.078	NS
	Female				
		58	23.67	2.711	
Self-motivation	Male				0.158
		62	23.60	2.525	NS
	Female	<u> </u>			- 10

NS - Not Significant

It shows that Technology and Engineering students' self awareness and self-motivation are not significant on the basis of gender. Hence, the stated hypothesis that Technology and Engineering undergraduates do not significantly differ in their self-awareness and self-motivation on the basis of gender is accepted.

## 8. Discussion

The findings of the present study revealed that self-awareness has positive and significant relation with self-motivation at the significant level of 0.01 (0.337). The positive correlation expressed that the students with high self-awareness will have high self-motivation as well. Similar result was obtained by the study of Anukool Hyde et al. (2002) who carried out the investigation to measure emotional intelligence using 200 subjects. The result revealed that self-awareness has positive and significant relation with self-motivation. And also Sahar Azizian & Abas Samadi, (2012) performed a research with the aim of

determining the relation between Emotional Intelligence (EI) and self-efficacy and it internal domains. For this research, Pearson Correlation shows that there is a positive significant correlation between self-awareness and self-motivation.

Further the present study revealed that self-awareness and self-motivation of technology and engineering undergraduates is not significant. The result also exposed that Technology students' self awareness and self-motivation are not significant on the basis of gender. Likewise Engineering students' self awareness and self-motivation are not significant on the basis of gender. Moreover, generally self awareness and self-motivation of undergraduate students are not significant on the basis of gender. Fathima Banu and Neelakandan, (2011) studied the emotional intelligence of college students. In that research it was found that college students do not differ in their Self-awareness and self-motivation (components of emotional intelligence) on the basis of gender. Similar result was also obtained by Fatt & Howe (2003). This study due to certain constrains was restricted to a smaller sample size of 120 individuals, it would be premature to generalize outcomes of this research to the entire population. Therefore, it would be more accurate and informative if future researchers could examine a larger sample.

# 9. Conclusion

The following conclusions were obtained from the analysis of the study. Self-awareness of undergraduates has positive and significant relation with self-motivation at the significant level of 0.01 (0.337). Self-awareness and self-motivation of technology and engineering undergraduates is not significant. Technology students' self-awareness and self-motivation are not significant on the basis of gender. Engineering students' self-awareness and self-motivation are not significant on the basis of gender. Technology and Engineering students' self-awareness and self-motivation are not significant on the basis of gender.

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