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# Perception of Male and Female Students towards Higher Education in Technical and Vocational Study

# Ahmad Esa<sup>1</sup> and Shangeetavaani Kannapiran<sup>2</sup>

#### Abstract

Education plays a prominent role and helps in the wellbeing and also the improvement in the standard of living of an individual. Education is considered as an important factor in human capital achievement. There is no denial, higher tertiary technical and vocational qualification will provide better opportunities for jobs in the working market. Higher the level of education and gualification, higher the level of income obtained in the successful career. The interest in obtaining higher tertiary educationist is clearly seen in the keen participation of men and women. In the past two decades the male dominance gender landscape has changed significantly. Women have taken the advantage over men marginally competing side by side in this respect. Yet men still form the majority of faculty and are remaining prominent. Although the gender gap is less significant, women are likely to undertake postgraduate courses and attain tertiary education inclusive of technical and vocational fields too. This rapid progress in skilled woman participation makes it a social phenomenon attracting the attention of educationalist. Thus, the paper discusses on the perception of male and female students towards higher education in technical and vocational study.

**Keywords:** Perception, Higher education (HE), qualification, dominance, participation

#### 1. Introduction

This research is basically based on the perception of students towards higher education in technical and vocational study. Most students answered that they intend to enroll at university (72.6%) when finishing upper secondary school.

<sup>&</sup>lt;sup>1</sup> Faculty of Technical & Vocational Education Universiti Tun Hussein Onn, Johor, Malaysia, Email: shangeeta27@hotmail.com

<sup>&</sup>lt;sup>2</sup> Faculty of Technical & Vocational Education Universiti Tun Hussein Onn, Johor, Malaysia, Email: ahmad@uthm.edu.my

While 13.5% are unsure yet on what to do where else others are keen to search for a job. As for gender, slightly more than half of males (56.2%) intend to attend university 20% of males remain uncertain about what to do once completing upper secondary school, compared to only 11.7% of females. On the other hand, 11.2% of male students are keen to go to work after completing school, but as for females the percentage is only 5.2%. Furthermore, there is a greater number of undecided students between males (19.1%) and females (11.7%). These statistics were by Antonella Bonfà, Michela Freddano (2011). Educators believe that contributions from the private sector and technical cooperation among vocational institutions and business or industry are mutually beneficial. Educators also believe that the public sector was inadequately fulfilling the human resource needs in the industrial sector. The government needs to play a more effective role in meeting the needs of VTE along with business and industry.

Malaysia is a fast developing country and to support the growth of Malaysian industrial sector Malaysia needs a highly skilled workforce. Hence, Malaysia has to remain competitive in an increasingly challenging global environment. To achieve a high-income nation by the year 2020, an approach that involves economic transformation is vital. Therefore, to fulfill this need Malaysian government encourages its citizens to attain higher tertiary technical and vocational education. Moreover, Malaysia considers highly skilled human capital as the nucleus of a knowledge-based economy. The education policy of the government is to reform education. The term TVET as used in Malaysia is synonymous with the term technical and vocational education as often used by the United Nations Educational, Scientific and Cultural Organization (UNESCO). According to UNESCO (2005), the aspects that differentiates TVET from other forms of education and training is its emphasis on work productivity. In all TVET programmes, the emphasis on work productivity is always the main aim although and in some cases, can be the only aim of education and training.

The middle of 1990s higher-educational policies in Malaysia both the public and private institutions have seen drastic reforms. According to Zuraidah, Mohd Zain (2008) stated that the Government is aware that the future of the country does not solely depend on educated personnel. The country needs a large pool of skilled workers who can handle the rapidly changing world of work. In fact, Malaysia has been categorized in the group of countries that have the potential to create new technologies on their own (Mani, 2000). At the dawn of the 21<sup>st</sup> century the various indicators have marked the transformation knowledge based on human development. The increase rate of participation ensures a knowledge based society. Knowledge based society, priority to science and technology with intellectual capital or mental human force is highly preferred in the present world.

VTE has taken on a major role in the industrial development of Malaysia. A significant amount of financial investment in VTE is allocated to produce effective skills of vocational and technical graduates. Broader societal changes have also been identified as part of the explanation for men's lower higher education participation and success. The increase in females' academic aspirations has been linked to the greater opportunities in the professional occupational sector. It is alleged that females understand that the returns associated with gaining a degree will be significant for them, and this includes working class females (Archer, Pratt & Phillips 2001; Aimhigher Midlands 2007). Conversely, evidence suggests that males may be equally, or indeed more, attracted to entering the world of work after the end of compulsory schooling, albeit not necessarily at a professional level (Cleary et al., 2007).

# 1.1 Definition

# 1.1.1 Perception

According to Rao and Narayana, 1998 said that perception ranks among the "important cognitive factors of human behavior" or psychological mechanism that enables the understanding of environment. In their own words, "perception is the process whereby people select, organize, and interpret sensory stimulations into significant information about their work environment."

They argued that perception is the single most important determinant of human behavior, stating further that "there can be no behavior without perception." Therefore, perception of a person is actually influenced by the attitude of that person itself. It is the manner in which something is understood and regarded in a positive thinking attitude. Perception may be concluded as human attitude and behavior working along in accordance with the changes in the environment.

# 1.1.2 Higher Education

The term 'higher education' generally refers to education at degree level and above usually education beyond secondary level. Higher education (HE) primarily describes post-18 learning that takes place at universities, as well as other colleges and institutions that award academic degrees, professional qualifications and Continuing Professional Development (CPD) modules. Whilst HE is the common name in the UK and Ireland, it is also known as post-secondary, tertiary and third level education (Claire Walsh, 2010). Tertiary education generally culminates in the receipt of certificates, diplomas, or academic degrees. Colleges, universities, institutes of technology and polytechnics are the main institutions that provide tertiary education. Acquiring this knowledge is to prepare oneself intellectually with the knowledge or skill for a profession.

### 1.1.3 Technical and Vocational Study

General and academic education is seen as that which builds analytical skills, knowledge and critical thinking. VET develops craftsmanship, practical experience and practical problem-solving. A 'vocation means direction of life activities as renders them perceptibly significant to a person, because of the consequences they accomplish, and also useful to his associates' by Stevenson, 2005. As for Foks, 1990 stated that there is a distinction between "technical" and "vocational" education where technical education is defined as development of skills and knowledge to be applied in practical situations while vocational education is defined as demonstrated and acknowledged development of knowledge, skills and attitudes necessity for a place in the workforce, at levels ranging from pre-trade to paraprofessional. Hereby, technical and vocational study is mainly aimed in obtaining skill based qualification for occupation or employment. These skills can be obtained through formal, non-formal and informal learning.

Vocational technical education aims at equipping young men and women with relevant productive skill training that will enable them fulfill the country's manpower needs in the field of technology, industry, commerce, agriculture, and business (Baiden, 1996).

Since the working world is changing rapidly with the development of technology there is increased in public demand on vocational technical education system to produce individuals with more opportunities for present and future prospects in multiple industries, and offer the individuals with enough skills for personal development and success in the changing society (Moss & Liang, 1990).

### 2. Literature Review

2.1 Perception of Male and Female Students towards Higher Education

Lately the perception of male students towards higher education is lacking. Educational segregation by gender has been found to play a significant role in shaping gender segregation within the human work force market mentioned by Smyth and Steinmetz, 2008. There had been a little variation across the social classes, females and males believe. For example, car repairs and woodwork are exclusively meant for men while mending and washing clothes are within the province of women. But now the transition in tertiary education is demonstrated by higher rates of participation and achievement of women relative to men. Gender distribution among major fields of study at the master's level is similar to the undergraduate level. Women represent the majority of students in all fields by Albert Street, 2011.

Recently, this concern has focused on the perception that females are now doing better than males. Mello (2008) found that females in the United States were more likely to anticipate in a professional job than males at all time-points between the ages of 14 and 26. Higher education (HE) is accepted as conferring benefits on the recipient beyond those associated directly with degree-level learning, although this confers significant advantages itself stated by Vincent-Lancrin, 2008. In the research for the differences between men and women in relation to HE assumes that factors outside the university context itself are primary drivers of the pattern. Such factors are keys to understand how and why gender patterns emerge. It is, nevertheless, also necessary to consider the impact of multiple factors at each distinct stage of the student lifecycle.

Female students make up the majority of mature students and the gender gap between men and female is greatest above the age of 21.

More women are seen moving into higher-paying occupations with qualified higher education in technical and vocational degree.

Vincent-Lancrin, also mentioned that overall female students are more likely to participate in courses across every type of HE institution than the male students. Nevertheless, it has been estimated that the UK will have the second highest concentration of women in HE by 2015 said by him, and that, by 2025, women may outnumber men. All the obstacles experienced being considered of not capable in creating science and technology and kept away from scientific positions and also denied in technical job will be overcome. Women have never ceased devising clever and smart combination to enable them to master things, most of the times away from the public attention of official science (Adeyinka, 2001). Even female students are believed of capable in completing their tertiary education successfully. Moreover, women are now more successfully achieving the tertiary education to obtain a 'good degree'.

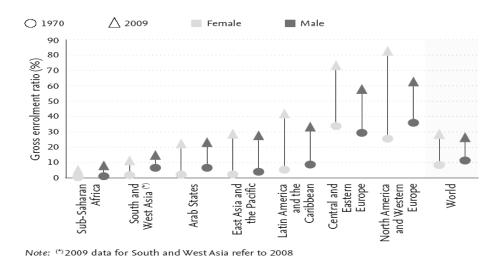
# 2.2 Gender Equality

Vocational education is part of the solution of the problem of workforce competitiveness (Buzzell, 1993) and is uniquely positioned to prepare students for skilled jobs in today's human resource market. For several decades, females seemed to be the "forgotten half" in vocational education because they have been either prepared for occupations in homemaking or low-pay, dead-end jobs. Nevertheless female participants could otherwise benefit from a wide range of high-tech skills that offer long-term employment and higher wages. Gender equality known as the same opportunity offered to women as are available to men. This is the main objective that makes human rights stronger and social justice as laid out in international laws. As Juru, 2002 states that gender equality implies a society in which women and men enjoy the same opportunities, outcomes, rights and obligations in all spheres of life.

Besides that, Vaithianathan (1995) notes that when evaluating the 'fairness' of outcomes it is always crucial to ask what part of the allocation was within the control of the individual. Even, genetics, family nurture and wider societal structures may influence how much control a person or a group has.

One idea is that measures of gender equality proceed from the assumption that men and women are free to develop their abilities and make their choices free of the restrictions imposed on them by stereotypic gender roles and prejudices. But it is likely some differences do result from active choices being made. He adds on that gender equality in this context means that the different behaviors, aspirations and needs of men and women are considered and valued. Under such a model women and men do not have to become identical, but their rights, duties and opportunities must not depend on whether they are born as women or men. In this concept it is equality of opportunity that matters rather than outcome. However, a major difficulty is determining whether people do actually have free choice or whether their preferences are constrained in ways that may or may not be gender-related.

At the economy-wide level, there is much evidence to suggest that labour demand in advanced industrialized economies has for a long time been shifting towards occupations that require higher levels of cognitive skill. As science and technology being the major drivers of development nowadays, a window of opportunity is produced for women in participating in the advancement and application of knowledge. In Malaysia, from the report of Asian Development Bank (ADB) of Women in Malaysia (1998) advancement of women has been the equal access of women to educational opportunities. Female enrolment at the primary and secondary levels was about half of total enrolment, while at the upper secondary level, female students accounted for about 52.3 percent of total enrolment. Female intake in universities expanded rapidly to 49.5 percent in 1994 from 37.2 percent in 1990. For example, 81 percent women engineers are as good as male counterparts in terms of technical skill, interpersonal skill and confidence as opined by executives of 104 organizations surveyed by IIT Bombay (Parikh & Sukhatme, 2004). The following figure roughly shows the gross enrollment ratio in HE by region and worldwide.



# Figure 1: Gross Enrolment Ratio in HE By Region and Worldwide, Years 1970 and 2009

Traditionally, engineering education has remained a male dominated segment of higher education. Women entrance in this field was limited and of recent origin. As mentioned by Durchholz (1997) women make up almost half of the global population. Still their contribution in many professions is limited. It is evident in the field of engineering, which is the second largest profession in the world. However, in recent times, female enrollment in engineering education has experienced an increase as can been seen in the figure too. Nowadays, it is very common to meet a woman engineering student. Based on Science & Engineering Indicators (2000) stated that women represented 12 per cent of chemical and industrial engineering, but only 6 percent of aerospace, electrical and mechanical engineers. Supported by the experiences of the Scandinavian countries and the United Kingdom, higher technical education institutes were introducing new forms of education like problem and project-based education which should increase the appeal of technical education and have a positive effect on the intake, retention and output of females and a different type of males too.

Therefore, underlying the idea of equal outcomes is the view that people have similar preferences that is; they want similar outcomes to others. Jha and Kelleher (2006) stated that the interest of both male and female to move away from existing unequal relations of gender.

Education can be and often is perceived as a process of expanding human capacities to contribute to the making of a just, equal and compassionate society. The open minded attitude towards HE has led women keen to seek and attain technical and vocational qualification and thus increasing their participation in VET.

# 3. Conclusion

At current environment, the modern knowledge economy faces many significant changes in the achievement in tertiary education in developing the skills needed by the country. Hence, the participation of female students in higher education (HE) especially in technical a vocational study is increasing recently. A result has been clearly seen as a 'gender transition', in which overall women are predominating in HE and the graduation rate of women is higher than men. Yet, there is still not a significant level of unease being expressed about the relative under performance of men in tertiary education. This is because men had been occupying graduate level employment after achieving their degree and with the qualification believing that one stands a better chance of getting a job with a good income.

Present industrialized economies are now eager to employ qualified technical and vocational trained graduates. The improvement in VET qualified skilled workforce helps to achieve higher economic growth. Thus, a more inclusive and open-minded attitude is required among students towards HE in technical and vocational study is seen lately. It is attributed to most organizations and employers are mainly targeting the university students in their recruitment campaigns.

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