Undergraduates’ Interest in Pursuing Academic Career: A Literature Review

JAKARIA DASAN
Universiti Malaysia Sabah
Email: jakaria@ums.edu.my
Tel: +6088320000

Abstract
Prior to reviewing factors that may attract undergraduates to academic career choice, the study discusses some theories related to how career aspiration develops leading to career choice decision. Studies on Generation Y indicate that current undergraduates who are from this cohort depend on their relationship with role model when making career decision. Healthy relationship between mentor and mentee ensures a continuous guidance which leads to the positive decision making. In addition, a flexible work arrangement is preferable since this generation requires a career that provides work life balance. Noteworthy, undergraduates’ career decision-making self-efficacy may play a significant intervening role with regard to academic career. Information gathered from this study could benefit the recruitment exercise of future academicians in terms of recruitment initiatives, socialization strategies, and orientation structures. Hence, these may not only ascertain an ample number of academicians in the future but also enhance professional satisfaction and fulfilment within the academic profession.

Key Words: Academic Career Choice; Role Model; Workplace flexibility; Career Decision-Making Self-Efficacy; Undergraduates of Generation Y.

Introduction
In its effort to become the higher education hub in the region, Malaysia could rely on its undergraduate students of Generation Y’s cohort to fill the gap that will be left behind by senior academicians, who are mostly from Baby Boomers Generation and Generation X. Noteworthy, previous research reported that undergraduates had encountered a problem in career planning competency (Niles & Bowlsbey, 2009). This may lead to late awareness on academic career choice that may spoil successful academic career pathway. Thus, aspiration to have enough numbers of academic staff in near future will not be attainable. Nevertheless, knowing that these undergraduates come from Generation Y’s cohort, there is a hope to have adequate number of academicians provided they have supporting role model and comfortable with the flexible work arrangement.

Background
The study by Herr and colleagues (2004) revealed that first year students have high level of anxiety in career exploration, lack of confidence, uncertainty about an occupation, low self-assessment and not knowing major strengths and weaknesses. In addition, these students are lacking of knowledge of work and not well-verse with what workers do at workplace. However, according to Herr and colleagues (2004), the final year students aged 21 to 23 were more able to crystallize and specify their career options because this group had been exposed to the university environment for a certain period of time (Ghani, Said, Mohd Nasir, & Jusoff, 2008). Thus, in the case of academic career choice, the undergraduate students are exposed to academic career as a possible career choice as they reach their final year. The career choice development theories (such as Super, Savickas, & Super, 1996; Gottfredson, 1981) commonly stated that individuals will
be ready to exert their career decision once they reach their late adolescent stage. This, however, indicates that by the time they graduate, many of them do not have a focused career. This could be one of the reasons why unemployment rate among undergraduates of Generation Y’s cohort fluctuate (Noor Azina Ismail, 2011; Norshima Zainal Shah, 2008; Annie Freeda Cruz, 2005). In view of this scenario, effort to incite their interest to pursue academic career is warranted. It is a worthy effort since undergraduates of Generation Y’s cohort are seen as capable of fulfilling the required number of academician in the near future due to the prevailing characteristics of Generation Y itself.

**Literature Review**

This section is divided into two parts. The first part concerns the theories involved in career choice development. This part will first explore how career aspiration developed (Gottfredson, 1981). The information will provide future researcher on how people come up with their career choice. In relation to the development of career aspirations, career decision theories which include trait and factor theories, career development theories, and recent theoretical statements will assist researchers to further their understanding on the career decision process. The second part presents literature review on role model, workplace flexibility, and career decision-making self-efficacy which predict academic career choice.

**Gottfredson’s Development of Occupational Aspiration**

Gottfredson (1981) introduced two career development and choices processes, called circumscription and compromise in explaining how occupational aspirations developed. According to Gottfredson (1981), people involve in these processes of weighting in (circumscription) and eliminating (compromise) some occupational alternatives during the growth process from childhood to adolescent years. The following figure graphically describes the process.
Gottfredson (1981) discussed some major constructs in explaining the development of occupational aspirations. At first, individuals adjust their self-concept with their occupational image that leads them to job preferences. Self-concept refers to the image of oneself that must be compatible with a job (Super, Starfishevsky, Matlin, & Jordan, 1963; Holland, 1992). Figure 1 shows that people made up their job preference once their self-concept match up with occupational images. Gottfredson (1981) refers preference as what one's likes and dislikes ranging from what is most desired to what would be least tolerable. These occupational images are the generalizations made on particular occupation. The generalizations include the personalities of people in those jobs, the type of work they do, the type of lives they lead, the rewards and conditions of the work, and the appropriateness of the job for different types of people. Gottfredson (1981) also noted that sex type (masculinity/femininity), level of work, and field of work influence individuals’ fair view of the similarities and differences of occupations. As a result of the adjustment made between self-concept and occupational images, one is able to reach job compatibility. This is the stage where one will assess the compatibility of occupations with their images of who they would like to be and how much effort they are willing to exert to enter those occupations. Despite being compatible with a particular occupation, one must be able to confront the accessibility issue. Accessibility concerns the probability of how easy it is to enter the preferred occupation and therefore influence one’s consideration in pursuing the viable alternatives. In view of this, one will rely on how realistic the choices are. In doing so, one tends to count on the perceived social space that the alternatives could offer. This social space reflects the sort of person one would like to be or is willing to be in the eyes of family, peers, and wider society (Gottfredson, 1981). Finally, one reaches the stage where one could identify the right occupational aspiration. Once people are able to determine their career aspirations, they are more eager to make a career decision. In short, theory of Circumscription and Compromise depicts how the career choice development takes place. As argued by Gottfredson (2002), images collected from the environment and stereotype held will enable individuals to develop a cognitive map of career choices. Individuals will circumscribe the available options and then make compromises by assessing the compatibility of different occupations with the images of themselves. This information on how career aspiration developed is useful in a career counseling session.

Career Decision Theories

Historically, Parsons (1909) initiated the first conceptual framework for understanding individuals’ career decision process (Brown, 2002). Parsons proposed three major steps or factors in making a wise career decision (Callhoun & Fineh, 1982). First, individuals must have a clear understanding of themselves in terms of their aptitudes, abilities, ambitions, resources, limitations, and knowledge of their cause. Second, individuals must know the career requirements and other matters related to the career such as the condition of success, advantages and disadvantages, compensation, opportunities, and prospects in different line of works. Third, individuals must see that there is a true reasoning between the first and the second factors. Following Parsons’ footstep, various theories on career choices were developed that explain how career choices take place. These career theories can be divided into three categories; trait and factor theories, developmental theories, and recent theoretical statements (Isaacson & Brown, 2000).

Trait and factor theories refer to the development of one’s traits in which one’s interests, values, personalities, and aptitudes, need to match the selected environment (Isaacson & Brown, 2000). Holland’s (1959) Theory of Vocational Choice and Kristof’s (1996) Person-organization fit (P-O fit) theory fall under these theories. Based on Holland’s theory, the unique patterns of ability or traits of individual can be measured and matched to particular occupation (Zunker, 2002). The six common traits are realistic, investigative, artistic, social, enterprising, and conventional (Holland, 1992). The other acclaimed trait and factor theory, person-organization fit theory, refers to “the compatibility between people and organizations that takes place when at least one entity provides what the other needs, or that they share similar fundamental characteristics, or both” (Kristof, 1996, p. 4-5). This theory espouses the idea that individuals seek out work environment in which they can fully utilize their skills and abilities, and express their
attitudes and values. It is due to the value congruence that enables both the individual and the organization to have a bind relationship (Chatman, 1989). It is learnt that the presence of supplementary fit and complementary fit may further strengthen the relationship. Supplementary fit means both parties have played their roles accordingly, while complementary fit refers to the capability of each party to further improve the relationship (Piasentin & Chapman, 2006).

The developmental theories incorporate the notion that the stages of personal and psychological development are primary factors that influence career choice and development (Gray & Herr, 1998; Isaacson & Brown, 2000). This idea becomes the basis for some career development theories such as Super’s Life-Span, Life-Space Theory (Savickas, 2002; Super, 1980; Super, Savickas, & Super, 1996), Levinson’s Season of Man’s Life (1978), and Season of Woman’s Life (1996). The development and implementation of self-concept in the career development process, which was proposed by Super (1951), introduced the influence of self-concept in matching individuals to a career. Self-concept is defined as a “picture of the self in some role, situation, or position performing some set of functions, or in some web of relationships” (Savickas, 2002, p. 163). The theory argued that individuals should choose a career that coincides with his or her own perception of the self. In addition, social, experiential, interactive learning, and reflective self-awareness formed self-concept. In his later research, Super (1963) developed a career development model called “the life-span, life-space theory.” The model describes that individuals go through a series of career stages; namely, growth, exploration, establishment, maintenance, and disengagement. Super proposed that individuals have been exposed to childhood experiences, family interactions, and life-long socialization experiences throughout the life span. The influences may take place as early as during their childhood which progresses until their adolescent stage (Super, 1957). People recognize the changes that they go through as they mature whereby career patterns are determined as a result of the interaction with socioeconomic factors, mental and physical abilities, personal characteristics and the opportunities to which persons are exposed. In the same time, people seek and identify similarity of the work roles and develop their self-concepts. At the end, decision making on career choice is finalized once they reach career maturity. Career maturity refers to the stage where one is ready to make a choice as defined by Gonzalez (2008, p.755), “one’s disposition to confront vocational or career development tasks as they are encountered, as compared to others who are in the same stage of life and facing the same developmental tasks.” This definition of career maturity originated from Super’s (1951, 1963), and Crites’ (1968) definitions. Similar to Super’s life-span, life-space theory, Levinson (1978; 1996) came up with models of life or career stages theory known as Season of Man’s Life (1978), and Season of Woman’s Life (1996). The theory posits that career development takes place during the early adulthood stage which can be divided into three sub-stages based on the range of age. Early adulthood stage starts from age 22 to 28. The next sub-stage is known as transitional age which falls within the age of 28 to 33. And the final sub-stage of early adulthood reaches its peak at age 33 to 45. Levinson (1978, 1996) revealed that individuals become more focus on their career choice and to decide on their career choice during the first early adulthood stage which falls within the age of 22 to 28.

One of the recent theoretical statements used in career choice literature that predicts people’s consideration of a career is Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett, 1994; Gore & Leuwerke, 2000). SCCT was later found to be primarily used in the career development within the framework of academia (Lent, Brown, & Hackett, 2002). SCCT posits that the triadic relationship between self-efficacy, outcome expectation, and goal will lead to a career choice. Self-efficacy is acquired through four primary sources of learning experiences; namely, personal performance accomplishments, vicarious learning, social persuasion, and psychological and affective states. Outcome expectations lead to the belief that people may get favourable outcome as a result of performing the required and necessary actions. Thus, having higher self-efficacy and anticipating positive outcomes will increase one’s confidence to achieve higher goal. Notwithstanding, in the case of choosing academic career, outcome expectation had been found insignificant as a mediator (Lent, et al., 1994; Springer, et al., 2001). Lent and colleagues (1994) had partitioned cognitive person variables and several additional sets of variables into two separate level of
theoretical analysis. Self-efficacy, outcome expectations and choice goals composed the first level, while physical attributes, features of the environment, and particular learning experiences compose the other level. Each variable in both levels had direct and indirect influence toward career-related interests and choice behaviour. The contextual variables were divided into two basic categories; namely, background contextual factors (distal), such as the type of career role models to which one is exposed, and contextual influences proximal to choice behaviour, such as the adequacy of one’s informal career contacts or exposure to avoid hiring discriminatory. Both distal and proximal contextual factors were hypothesized to affect the career choice process. In their model, Lent and colleagues (1994) proposed that SCCT can moderate and directly affect interests to choice goals, and goals to actions. Nonetheless, barriers or inadequate support may hamper individuals’ intention to put career interest into actions. Perceived contextual supports and less barriers will facilitate the realization of interest into goals, and goals into actions. Similar with Lent et al.’s (1994) original framework, Sheu and colleagues (2010) found that the presence of supports and the relative absence of barriers will directly or indirectly promote choice goals through 6-variable paths. The 6-variable paths model (Sheu et al., 2010) indicated better support in representing the pathways from contextual variables to choice goals, which was partially mediated by self-efficacy and outcome expectations. In addition, both supports and barriers represent environmental or contextual factors that commonly predict career choice decision.

Academic Career Choice

Different profession might have similar or different influences. Academic or teaching profession has been known as a helping profession in which personal and social experiences, as well as inspiration to serve others are identified as among the most possible influences that attract people to this profession (Fischman, Schutte, Solomon, & Wu Lam, 2001). Arnett (2011) found that personal enjoyment of the subject matter, and the influence of high school teachers attracted participants to the teaching career. Another study on academic career choice found a similar likelihood through which social cognitive career theory relates personal variables and environmental variables such as their interaction with the lecturers, and the allure of academic environment itself, to career pathway (Lent, Brown, & Hackett, 2000). Other studies had also indicated reasons why people choose academic career; such as, early experience and family influences, undergraduate and graduate school experiences, personal competence (Lindholm, 2004), social status, career fit, prior considerations, financial reward, time for family (Richardson & Watt, 2005), role model and mentor, self-efficacy (Quimby & DeSantis, 2006; Fried & MacCleave, 2009; Nauta & Kokaly, 2001), science self-efficacy, parental emotional support (Scott & Mallinckodt, 2005), individual’s position, occupational preference, perception of academic profession, social status and prestige, and perception about what being an academic entails (Portnoi, 2009). All these reasons had been found to significantly predict academic career choice that provides support for the current study.

Lindholm (2004) had indicated that inherent attractions of academic work had attracted individuals to academic career. These inherent attractions exist in the form of autonomy and the allure of the university work environment which can be referred to personal and environmental factors respectively. Both factors are relevance in academia due to the nature of works of the academicians who need to engage in research, writing, and teaching tasks based on their ability to do what they want, when they want, and how they want (Lindholm, 2004). These inherent attractions of perceived autonomy and perceived workplace flexibility concur with the finding that the attraction of anticipated working hours and working conditions influence career choice (Goldacre, Turner, Fazel, and Lambert, 2005). In other words, academic career aspirations foresee the perceived flexibility which enables them to arrange for the core aspects of their work (Hill et. al., 2008). Subsequently, this will allow them to allocate more time for family (Richardson & Watt, 2005).

Generally, people are more certain with a career if they have personal competence in the career (Daniels et. al., 2006). Daniels and colleagues (2006), who had examined student teachers’ commitment to the teaching profession, revealed that perceived control affects career competency and career certainty. There are two
types of perceived control; primary and secondary. Primary control is a component of perceived control which refers to individuals' belief that they possess necessary self-regulatory skills to effectively influence their performance, whereas secondary control is the other component of perceived control which refers to the capability of the students to psychologically match their environment (Daniels et al., 2006). While primary control increases the confidence in teaching competency, secondary control leads to career certainty. These tendencies occur only if the student teachers experience low career anxiety that causes them to rely more on their skills or aptitudes. Subsequently, this will influence their career choice as well (Goldacre et al., 2005). Other than personal competency, personal factors of individual's position, occupational preference, and perceptions of academic profession have also been recognized as among the most influential factors (Portnoi, 2009). This is based on person-environment fit theory which shows that individuals choose a career based on perceived compatibility with the working conditions and environment (Gottfredson, 2002).

Richardson and Watt (2005) further noted that career decision is strongly made after due consideration is held with close people like family members, friends, and particularly, mentors who are referred to as role models. Persons that are perceived as role models have greater impact on career decision making because they do not only inspire but also support and guide academic and career development via their support and guidance (Nauta & Kokaly, 2001). Nauta and Kokaly (2001) proposed the importance of role model in facilitating individuals' academic and career development. Among the two types of role model, inspiration/modelling has more impact than support/guidance in predicting academic and vocational decisions (Nauta & Kokaly, 2001). Quimby and DeSantis' (2006) had followed Nauta and Kokaly's (2001) suggestion of using inspirational/modelling to investigate role model's influence. They found that role model affects career choice indirectly through vicarious learning experiences that increases self-efficacy, thereby increasing interests and choice actions (Quimby and DeSantis, 2006). Nevertheless, study had shown that role model may influence individual's career decision by offering support which will foster a healthy relationship between the role model and the modeler (Fouziah, Amla, & Ramlee, 2010).

Role Model

Role models may influence modelers' career indecision, not only by direct modeling and imitation, but also by offering support and fostering a healthy relationship with the modeler (Nauta & Kokaly, 2001; Fried & McCleave, 2009). However, it will not be influential unless the individuals have identified and have tied a close relationship with role models. Role models had been identified as an influential contextual variable that predict career choice either directly (Lent, Brown, & Hackett, 1994) or indirectly through self-efficacy (DeSantis & Quimby, 2004). Lent and colleagues (1994) had unveiled the role of social cognitive career theory (SCCT) in displaying career role models as having a direct effect on career choice. SCCT controls the influence of role model in which role model provides vicarious learning experiences that increase the tendency of individuals to choose a specific career (lent et al., 1994). This was supported in a research whereby learning experiences are gained as a result of a particular teacher’s influence (Goldacre et al., 2005). DeSantis and Quimby (2004) found the partial mediation of self-efficacy on the relationship between role models and occupational choice which may increase the preference level on a career (Greene, Sullivan, & Beyard-Tyler, 1982; Savenye, 1992).

Anderson and Gilbride (2005) found that students who are still undecided about their future career choice, could be influenced by receiving career information. Role models may not only inspire but also show how to do something (Nauta & Kokaly, 2001) including to provide career information related to the career. An instrument measuring the effect of role models on academic career choice was developed by Nauta & Kokaly (2001). The instrument measures the influence of others and can be used to assess influence from all possible role models simultaneously. That is why the target role models are not specified within the items. Based on social cognitive career theory (Lent et al., 1994), the contextual supports that role models provide (through support/guidance and inspiration/modeling) may assist students in identifying their
vocational identity (Nauta & Kokaly, 2001). In view of this, support and guidance could facilitate academic and career development. Nauta and Kokaly (2001) found students inspiration/modeling subscale would be positively associated with the amount of occupational information. This is because students would found it easier to recognize characteristics and goal that are deemed worthy to them. Quimby and DeSantis (2006), who studied the career choice of female undergraduate students, examined role models’ indirect effect on career choice via self-efficacy. Results revealed that role models have a small but significant direct influence on career choice. The more exposure given to role models, the better the female students feel in making career decision.

Workplace Flexibility

The job attributes (Moy & Lee, 2002), time for family (Richardson & Watt, 2005), and career flexibility (Edwards & Quinter, 2011) are some of the considerations that attract people to academic career. These aspects characterize workplace flexibility. Moy and Lee (2002) had included the job itself, compensation or security, and the company or work environment as the three job attributes perceived to be importance by people in choosing a career. The current study is interested in examining further the effect of the work environment to academic career choice since study had shown that the allure of university work environment had the huge effect (Lindholm, 2004). Workplace flexibility provides a flexible work arrangement that enables individuals to balance their time at work and life in general. Based on this nature, the attribute of the environment actually characterizes workplace flexibility (Bronfenbrenner & Ceci, 1994).

Workplace flexibility can be viewed from worker’s perspective and organizational perspective (Hill, Grzywacz, Allen, Blanchard, Matz-Costa, Shulkin, & Pitt-Catsoutophes, 2008). The degree to which workers are able to make choices to arrange the core aspects of their professional lives, particularly regarding where, when, and for how long work is performed falls under worker’s perspective. On the other hand, Organizational perspective refers to the “degree to which organizational features incorporate a level of flexibility that allows organizations to adapt to changes in their environment” (Dastmalehian & Blyton, 2001, p. 1). The current study looks at workplace flexibility as it is seen through the worker’s perspective since this study investigates individuals’ point of view as employees. Individuals become more motivated, loyal, and engaged to the career once they perceive flexible work arrangement (Hill et al., 2008). Hill and colleagues (2010) had identified components of workplace flexibility which include work at home, schedule flexibility, and work hours. The study revealed that the implementation of workplace flexibility may benefit both individuals (employee) and the organization (employer). This is because workplace flexibility reduces work-life conflict that enables individuals to work at flexible hours and flexible place (work-at-home). With regard to the university’s environment, flexibility refers to the ability of the faculty members to construct work arrangements that may lead to meaningful personal lives which include allowing faculty members to have variable time bases in tenure-track and tenured appointments, and adjust probationary periods accordingly, and providing work-life leave policies to support faculty members during specific periods of personal and family related need (Gappa, Austin, & Trice, 2007).

Career Decision-Making Self-Efficacy

Career decision-making self-efficacy (CDMSE) investigates individuals’ confidence in making career decisions. Study showed that students who are more confident in their ability to complete the tasks related to career decisions were more certain because they have a clear vision of their goal, strengths, and interests (Gushe, Clarke, Pantzer, & Scanlan, 2006). In contrast to career certainty, the career indecision was negatively correlated with career self-efficacy (Starica, 2012). Taylor and Betz (1983) revealed that career indecision among university students is due to their inability to make a choice whereby students who were less confidence in career decision-making tasks were also less confidence in making career choices. The level of confidence in decision making will determine the success of their career decision. Students’ level
of confidence in making career decision determines the success of their career decision. In order to develop the confidence, five tasks of career maturity consists of self-appraisal, vocational information seeking, career planning, problem-solving, and goal selection need to be measured (Luzzo, 1993). These measures make up CDSE scale (Taylor & Betz, 1983). In addition, CDSE had served as a significant mediator to motivate people to achieve special goals, such as pursuing a career in particular areas (Feltz & Payment, 2005). A study on CDSE of undergraduate students revealed that problem solving subscale was the most difficult task to do, while self-appraisal and occupational information subscales as the least difficult (Isik, 2010). The study also found that the older group (21 and over) scored significantly higher on goal selection, planning, self-appraisal, and occupational information subscales than younger group (20 years of age and below). In addition, CDMSE displays the ability to make career-related decisions in which low score on CDMSE indicates the inability in career-related decisions. Consequently, this may have an impact on students’ future career plan. Furthermore, Patton and Creed (2007) found a significant correlation between CDMSE and students’ career aspirations and expectations in which students who earned a high score in CDSE scale were those students who were high in career aspirations and expectations. Thus, the five tasks of career decision making need to be at a significant score to ascertain that one is ready to make a career choice (Bakar, Zakaria, Mohamed, & Hanafi, 2011).

Conceptual Framework

Based on the literature review, a conceptual theoretical framework is proposed as follow;

![Conceptual Framework Diagram]

Figure 2. Conceptualizing theoretical framework

Conclusion

It is common for undergraduate students to feel uncertain about their career throughout their undergraduate years. However, prolonged feeling of career uncertainty may lead to unemployment immediately after graduating. Nevertheless, career theories argued that career uncertainty among students decrease as they reach their final year (Felton, Buhr, & Northey, 1994). Even though teaching has been regarded as the central expectation of academics in higher learning institution, heavy expectation has been emphasized on
research especially on information or knowledge related to their subject field. Hence, in order to have a successful career in academia, one needs a continuous support and guidance from their senior or role model. Moreover, the shortage of suitably qualified and experienced teachers may get worse in the future unless teaching as a career can be made attractive to new and older graduates (Serow & Forrest, 1994). In view of this, role models’ influence is seen crucial in making academic career popular among the new academic career aspirations. Perceived workplace flexibility found in academic career has also been an attractive factor that could incite one’s interest to academic career. In fact, Generation Y has been closely linked to prefer a career that caters for work-life balance. Thus, these may become significant factors in attracting the students toward academic career. In addition, the students’ high confidence in career decision-making self-efficacy will strengthen their pursuance of academic career choice.

References


Magner, 1994


