Academic Achievement, Self-Efficacy, and Career Aspirations as the Predictors of Career Success for a First Job

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ABSTRACT

Academic achievement is a variable that is used by companies in employee selection. Self-efficacy and career aspirations is seen as having an influence on career success. A discriminant analysis was performed to test whether academic achievement, self-efficacy, and career aspirations could be used as predictors to differentiate between a person who was successful and a person who was less so in their career, especially in the early years of employment. More successful people had a tendency for Pure Challenge by which is meant that the person is able to overcome challenges and a readiness to take charge. Lifestyle aspiration is also seen as important in career development. And the last aspiration was Entrepreneurship, indicating that a more successful person usually wanted to build something and take charge. The findings of this research support the claim that academic achievement was not the only factor which contributed to career success. Self-efficacy, and career aspirations play a role in the career success.

Keywords: Academic achievement, career aspirations, career success, generation Y, self-efficacy, training and development

INTRODUCTION

Many studies have shown the effect of diverse variables on career success. The measurement of success itself is an abstract concept as Hughes (1958) stated that the success of a person could be divided into ‘objective success’ and ‘subjective success’. Objective success is the achievements of a person that can be both seen and valued by others, while subjective success is based on their internal satisfaction. Heslin (2003) divided success measurement into ‘self-referent’ and ‘other-referent’. For the self-referent, objective and subjective success can be measured based on the person’s...
personal achievements, while the other-referent is measured by comparing the achievements between two people.

Academic grades are widely used to measure high school or university students’ capabilities. This common practice is also used as a procedure in deciding who to hire. Hashim (2009) stated that school grades were used as the first criteria in employee selection, and Wise (1975) found a relationship between academic achievements and a person’s job performance. The research had limitations because job performance was measured based on the salary of the respondent with the assumption that the salary would increase when the performance improved.

The other criteria to measure the progress of career success are ‘self-efficacy’ and ‘career aspirations’.

Self-efficacy is related to career interest and a person’s belief in their ability actually influenced the interest and career choice (Tang et al., 2008) and a person’s career aspiration is related to individual’s perception of success.

In the light of competition in the job market, an individual who joins the work force for the first time needs to know the factors that can influence career success. Understanding the dominant factors should allow the candidate to develop their skills earlier to enhance their career. Could academic achievements, self-efficacy, and career aspirations be used as factors to differentiate between a more successful and a less successful person?

The paper originally did not have intention to highlight the generational issues. However,

In the 21st century the workforce has employed four cross generational employees which was Traditionalist, Baby Boomer, Generation X and Generation Y in the same time (Shaw & Fairhurst, 2008). This paper hopes to contribute to the understanding of the characteristics of Generation Y’s career success.

In measuring the success of a person, one variable would be career success. According to Seibert and Kraimer (2001) career success follows the accumulation of positive work and psychological outcomes resulting from one’s work experiences. Hughes (1958) defined career success into two categories which were objective career success and subjective career success. Career success encompassed “the real or perceived achievements individuals had accumulated as a result of their work experiences”. Hughes (1958) stated that objective career success is directly observable, measureable and verifiable by an impartial third party using the observable data of the person. Nicholson (2000) proposed ‘pay’, ‘promotions’ and ‘occupational status’ as the verifiable attainments of a person’s objective career success.

According to Abele and Wiese (2008) subjective career success emphasized the beholder’s own evaluation of his/her career. Heslin (2003) proposed that the
self-referent and the other-referent could influence the subjective career success. The subjective career success related to how a person sees their career according to their personal evaluation, by comparing their career with their self-values for the self-referent and to the situation of his/her surroundings for the other-referent.

Rivkin et al. (2005) stated that academic achievement is a cumulative function of current and prior family, community, and school experiences. So, the academic achievement represented the student’s current and prior experiences. This means that academic achievement also represents, to some extent, the intelligence of the student. Academic achievement is usually measured by the grades assigned to a student based on the student’s achievement during the academic study process. The grading method and the grades value could be different from one school to another. Hashim (2009) stated that school grade was usually used as the first selection criteria in the employee selection process and Wise (1975) found out that there was a relationship between the academic achievements and the job performance of a person.

Although perceived ‘self-efficacy’, the belief the capabilities to produce designated levels of performance that could influence and affect someone’s lives (Bandura, 1994), was used in psychology, the application of self-efficacy was not limited to the psychology field. The application was extended to cover activities from academic activities, sports, and professional jobs. Judge and Bono (2001) claimed that there was a correlation between self-efficacy and job performance. This research showed that although self-efficacy resided in the mind of a person, such a belief had an impact on real life events such as job performance. Hackett and Betz. (1981) stated that women with low self-efficacy had lesser career achievement and opportunity.

Rasdi et al. (2009) stated that career aspiration referred to the socioeconomic level of a person’s ideal occupation. Furthermore, the research also showed that “overall career aspirations were significantly related with subjective career success”.

Schein (1985, 1996) developed a model called ‘Career Anchors’ to categorize career aspirations into 8 anchors which were (1) Autonomy/Independence: self-reliant attitude that prefers to do things according to his/her own way; (2) Security/Stability: looking for security in a job that can give long time stability; (3) Technical-functional competence: aspiration towards the competence in one field by honing skills and concentrating on one field; (4) General Managerial Competence: having the desire to climb the ladder and gaining more control over the organization; (5) Entrepreneurial Creativity: Seeking for innovations and the possibility of building his/her own business; (6) Service or Dedication to a Cause: Aiming to do things for the greater good and the desire to dedicate oneself to shaping a better world; (7) Pure Challenge: seeking challenges and new problems to be solved; (8) Lifestyle:
The lifestyle is more important than the career itself because the career is to support the lifestyle. It was possible for a person to have high aspirations for several categories or even all the categories. However, usually one or more categories were stronger than the others.

Generation Y is the name given to the most recent demographic group to have entered higher education and the world of work. The start and end dates, which define the parameters of Generation Y, vary from the beginning dates of 1977-1982 to ending dates of 1994-2003 (Shih and Allen, 2007 inside Shaw and Fairhurst, 2008). The term “Millenials” was used by Howe and Strauss (2000) to describe the population who was born between 1982 and 2000.

Because of every one’s life experiences shaped who they were, it was no surprise that employees who grew up in different time period would have different world views, expectations and values, resulting in preferred methods of communicating and interacting with one another (Glass, 2007) and different belief about career (Dries et al., 2008).

METHOD
Research Model

The framework of this research was adapted from Rasdi, et al. (2009) with two additional variables: academic achievement (Wise, 1975; Rivkin et al., 2005; Hashim, 2009) and self-efficacy (Schwarzer et al., 1997; Tang et al., 2008).

The research model is described below:

![Figure 1. The Research Model](image)

The model above was designed to analyze the relationship between the variables and to identify the most dominant factors that supported career success. The samples were divided into two groups which were: the more successful; and the less successful. The research methodology was adapted from Esters and Bowen (2005) which used a discriminant model to prove the hypothesis that academic achievement, self-efficacy, and career aspirations could discriminate between more successful and less successful people’s careers. There were two phases of the analysis: (1) finding the criteria that differentiate between respondents based on how successful they were (2) testing the hypothesis by ascertaining the success rate of the discriminant analysis.

The operationalization of variables was explained below.

1. Dependent Variables – Career Success
The respondents were divided into two groups: the more successful group and the less successful group based on the raise of salary since the first time they joined taken into account the year of employment. If the salary of the person
is above the national average salary of his/her job, they were in the more successful group. The average salary lists used were the lists provided by Kelly Services, a recruitment consultant in Jakarta.

2. Independent Variables
   a. Academic Achievement – Final GPA

Hypothesis 1: The discriminant model where academic achievement, self-efficacy, and career aspirations serves to differentiate the person who had a more successful career with their counterparts who were less successful.

METHODOLOGY
The population was the workforce in Jakarta with at least a bachelor degree. The sample was 100 people, determined by Slovin’s equation with a confidence level of 90%. The sampling method was convenience sampling. The questionnaire was distributed using referral and the available network.

Data Analysis
Reliability was tested using Cronbach’s Alpha (if higher than 0.60 the reliability is good). The validity was tested using the cross validity method to measure the hit ratio. If the prediction success rate was 50% bigger than the ratio got by classification by chance, then the validity is good - the bigger the difference the better the validity. The success rate of 50% was determined because the sample size between the more successful and less successful was divided equally Hair et al. (1998). Logistic regression was also formulated to predict and explain a binary (two-group) categorical variable rather than a metric dependent measure. Logistic regression has the advantage compared to discriminant analysis especially when the basic assumptions particularly normality of the variables are not met. Discriminant analysis relies on strictly meeting the assumptions of multivariate normality and equal variance-covariance matrices across group which are difficult to achieve in most cases. In addition, logistic regression is similar with the nonlinear regression and equivalent to two-group discriminant analysis and may be more suitable in many situations (Hair et al., 1998).

RESULTS AND DISCUSSION
Respondents Profile
Gender and Age Group. Of 100 respondents, there were 70 males and 30 females. 86% of the respondents were between the age of 21 and 30 years old, indicating that most of the respondents were from the same generation. The respondents were born between 1981 and 1990 which classified them as the Generation Y according to the definition from Shih and Allen (2007).
Time when starting to work. The year that the respondents began to work following their graduation was used to classify the respondents to the group of more successful or less so. The respondents started working between 1997 and 2011. Some of the respondents had already worked when they were still studying in the university. The length of the working year would not be taken into account and not be a focus of differentiation in this research. Although, this may be acknowledged as the limitation of this research it has to be noted that 79% started working between 2005 and 2010, corresponding with the distribution of the age of the respondents.

Academic Achievement. Because some of the respondents had refused to put their exact GPA number, the respondents were divided into five groups: (1) GPA below 2.00; (2) GPA between 2.01 to 2.74; (3) GPA between 2.75 to 3.24; (4) GPA between 3.25 to 3.59 and (5) GPA more than 3.59. Most of the respondents were in the group 2.75-3.24 and only 12% of the respondents were in either group 1 or 5.

Reliability and Validity
The measurement using a set of 10 questions developed by Schwarzer et al. (1997) was reliable, because the Cronbach’s Alpha of Self-Efficacy was 0.852 which was higher than 0.70. However, not all of the questions were highly correlated. Question number 3’s (It is easy for me to stick to my aims and accomplish my goals) Corrected Item-Total Correlation was 0.240 which meant it was not correlated. The argument to keep the questions in the analysis was because we believed that the measurement of the self-efficacy developed by Schwarzer, et al. (1997) was a set by itself and thus we did not eliminate any of the questions to keep the originality of the measurement.

The measurement used 25 questions by Igbaria and Baroudi (1993) which based on 41 questions by Schein (1985) was reliable, because the Cronbach’s Alpha for the 25 questions is 0.799 which is higher than 0.70. We found out that some of questions had low correlation. However, after deleting low correlated questions, the value of Cronbach’s Alpha stayed similar, except for the questions number 8 (The organization will give me a long run stability).

Discriminant Analysis
The hypothesis was the discriminant model whereby academic achievement, self-efficacy, and career aspirations would differentiate those who had more successful careers with those who were less successful in their careers.

The discriminant model successfully classified (82%) that the validity of the discriminant model was high and was successful in classifying the two groups. When analyzing the discriminants, the respondents were divided into two groups. To minimize subjectivity, career success was defined as the raise of salary since the first time they joined taking into account
the year of employment. There were 50 respondents who were members of the more successful group (value 1) and 50 respondents with the less successful group (value 0). All single questions are entered as dimension.

Table 1

<table>
<thead>
<tr>
<th>Success_value</th>
<th>Predicted Group Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Original Count</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
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</table>

a. 82.0% of original grouped cases correctly classified.

**Homogeneity of the group.** One of the assumptions that should be accepted in the discriminant analysis is the homogeneity of the group which is reflected by the value of ox’s M. The p-value of Box’s M of the model is less than 0.05, which indicates that the group is heterogeneous.

**Discriminant Loadings.** The Canonical Correlation in the table on Eigen Value is used to explain the degree of relationship or the magnitude of dependent variable variances that can be explained by independent variables. The model above can only explain 46% variances of the variable independent by the discriminant model.

**Discriminant Weights.** The Test of Equality of Group Means showed the significance of each questions to discriminate the two groups and shows that GPA, self-efficacy’s question numbers 1(I can always manage to solve difficult problems if I try hard enough), 2 (If someone opposes me, I can find the means and ways to get what I want), 7 (I can remain calm when facing difficulties because I can rely on my coping abilities), 8 (When I am confronted with a problem, I can usually find several solutions), 9 (If I am in trouble, I can usually think of a solution), 10 (I can usually handle whatever comes my way); career aspirations’ question numbers 4, 6, 10, 11, 16, and 25 were significant predictors to discriminate the two groups.

Career Aspirations’ question number 4 (Working on problems that are almost insoluble is) and 16 (The only real challenge in my career has been confronting and solving tough problems, no matter what area they were in) referred to the respondent’s aspiration towards Pure Challenge from the Career Anchor (Schein, 1985, 1996). Career Aspirations’ question
number 6 (To be in charge of a whole organization is) reflected the aspiration towards Managerial. Career Aspirations’ question number 10 (Developing a career that permits me to continue to pursue my own lifestyle is) was for the aspiration towards Lifestyle. Career Aspirations’ question number 11 (Building a new business enterprise is) and number 25 (I have always wanted to start and build up a business on my own) referred towards aspiration towards Entrepreneurship from the Career Anchor. (Schein, 1985, 1996).

However, as overall function, the model Wilk’s Lambda shows a p-value of 0.07 (bigger than 0.05) which means as an overall function, the model cannot show a differentiation between group.

Following from the above finding a model is constructed using the variable of GPA, Overall Self-Efficacy and Selected Career Aspiration (questions 4, 6, 10, 11 and 16).

The model’s statistical result are as below:

Table 2
The Statistical Result of Second Model

<table>
<thead>
<tr>
<th>Test of Equality Group Means</th>
<th>Block M for homogeneity</th>
<th>Eigenvalues for Canonical Correlation</th>
<th>Wilk’s Lambda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant value:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Overall Self Efficacy</td>
<td>• p value 0.012&lt; 0.05</td>
<td>• Canonical Correlation value:</td>
<td>• p value 0.01 &lt; 0.05</td>
</tr>
<tr>
<td>• Career Aspiration question number 4 and 10</td>
<td>• Reject H0</td>
<td>0.464</td>
<td>• Significant difference between group</td>
</tr>
<tr>
<td></td>
<td>• Group is heterogeneous</td>
<td>• Square = 0.215296</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 21.5% of the dependent variable is explained by an independent variable</td>
<td></td>
</tr>
</tbody>
</table>

The model above can explain the difference between groups compared with the first model. Although the hit ratio of classification result is lower than the first model. This model can only classify 70% of the group.

The summary for two models. The summary of the analysis is that the discriminant model where GPA, Self-Efficacy, and Career Aspirations will differentiate a person who is more successful career wise. When eliminating the insignificant Career Aspiration question and treating Self Efficacy as one variable, the model’s predictability is significantly improved. The second model concluded Self-Efficacy, and Career Aspirations can be used as the predictors to discriminate the two groups. A more successful person is expected to aspire towards Pure Challenge and Lifestyle.

More successful people were expected to have a tendency for Pure Challenge which meant that the person was able to
overcome challenges and tough problems and did not run away from them. They were also expected to have managerial aspiration which meant that the person was ready to take charge. Lifestyle was also an aspiration for a more successful person because the person would develop a career that supported his/her lifestyle. And the last aspiration which is significant in the first model was Entrepreneurship, indicating that a more successful person usually wanted to build something and take charge.

The result supported Rasdi et al. (2009) who stated that 'managerial' and 'pure challenge' positively and significantly influenced the managers' career needs, values and interest. A person that had good managerial aspirations could perform better in a managerial position and with their endurance against challenges, the position could be maintained. Greenhaus et al. (2000) claimed that career success would accrue for people that stay true to 'lifestyle preference'. Schein (1996) stated that 'lifestyle' means that the person was trying to balance their personal life and career. He argued that the core of entrepreneurship was creativity as there were many new opportunities that could be taken-up by individuals with entrepreneurship aspirations. Simonton (1997) supported the claim on creativity by claiming that creativity can influence the career trajectory of a person. Since creativity was the core of entrepreneurship, the entrepreneurship aspiration could also support the career of the person. Individuals who had an aspiration towards 'pure challenge' would be most likely to endure any given challenge and with managerial aspirations the individual would seek to achieve a higher position.

This result also supported the characteristics of Generation Y, which was known as “the most technically literate, educated and ethnically diverse generation in history (Eisner, 2005, p.6)”. The Pure Challenge group is willing to become active learners and face the challenge as well since the nature of these challenges will itself evolve rapidly with technological change (Schein, 1996). Familiarity with the technology which is represented by this generation’s familiarity with new gadget showed the relevancy of this career aspiration that may support the career success of Generation Y. Apart of that, this generation is capable of multi-tasking quickly (Friefield, 2007), is result oriented and have appetite for work and pressure (Shih and Allen, 2007) which matched the definition of Pure Challenge related to beating the odds. The characteristic of frequent changing of jobs might be related with seeking more challenges, though issues such as self-esteem and narcissism and the decline of social rules too are important. Generation Y also seeks work life balance and if forced will select family and friends over work (Crumpacker and Crumpacker, 2007) and this characteristic was correlated with the other predictor which is Lifestyle. Schein (1996) mentioned that the boundaries of work had become more fluid and ambiguous which indicated that people seek more flexible job
arrangement compared with the traditional 9 to 5 arrangement. The sensitivity to the social awareness of this Generation Y (Eisner, 2005, p.6; Glass, 2007) could be interpreted also as their way to balance work and life. Glass (2007) stated that according to the Cone Millenial Cause Study (Cone, 2006) this generation would turn down a job offer from a company perceived to be irresponsible to society.

The Entrepreneurship anchor represents the creativity as the response to the dynamic complexity of the industry. The need for new products and services as a response to the evolving technology will be increasing in the future (Schein, 1996). The overall model fit was also tested by logistic regression. There were 3 models that was developed which were (1) the independent variables was average GPA, Self-Efficacy and Career Aspiration, with each individual questions were entered simultaneously (2) the independent variables was average GPA, average Self-Efficacy and overall Career Aspiration and the last model (3) the independent variables was average GPA, average Self-Efficacy and individual Selected Career Aspiration. The summary of the results is below:

Table 3
The Logistic Regression Result

<table>
<thead>
<tr>
<th>Model 1: Logistic Regression with each individual questions a variable</th>
<th>Model 2: Logistic Regression with average GPA, average Self Efficacy and average Career Aspiration as variable</th>
<th>Model 3: Logistic Regression with average GPA, average Self Efficacy and Selected Career Aspiration from Model 1 results as variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant variable</td>
<td>GPA</td>
<td>Average Self Efficacy</td>
</tr>
<tr>
<td></td>
<td>Self-Efficacy 8 &amp; 9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Career Aspiration 2, 4, 10, 13</td>
<td>Career Aspiration 10</td>
</tr>
<tr>
<td>Reliability</td>
<td>Nagelkerke R square : 0.688</td>
<td>Nagelkerke R square : 0.119</td>
</tr>
<tr>
<td></td>
<td>68.8% can be explained by this model</td>
<td>11.9% can be explained by this model</td>
</tr>
<tr>
<td>Good fit model</td>
<td>Hosmer and Lemeshow Test : p value 0.247 &gt; 0.05</td>
<td>Hosmer and Lemeshow Test : p value 0.169 &gt; 0.05</td>
</tr>
<tr>
<td></td>
<td>Good fit</td>
<td>Good fit</td>
</tr>
<tr>
<td>Classification ratio (validity)</td>
<td>86%</td>
<td>58%</td>
</tr>
</tbody>
</table>
All of the models are fit to explain the differentiation between two groups according to the Good Fit Model. Hair et al. (1998) tells us a good model fit is indicated by a non-significant chi-square value. However, the highest reliability or the ability to explain the differentiation between group is the Model 1. Model 1 can classify 86% of the sample to a group.

Comparing the logistic regression and discriminant analysis result, we would found the different result for Career Aspiration. In the Model 1 Logistic Regression, the question number 2 (Managerial) and 13 (Service) can be significantly differentiate the group. In the model 3, only Lifestyle could be used as predictor to determine a career success. This finding is in line with supposed character of Generation Y that seeks work life balance and if forced will select family and friends over work, seek more flexible job arrangement compared with the traditional 9 to 5 arrangement (Crumpacker and Crumpacker, 2007) and the sensitivity to the social awareness of this Generation Y (Eisner, 2005, p.6; Glass, 2007) could be interpreted also as their way to balance work and life.

CONCLUSION
The discriminant model whereby GPA, Self-Efficacy, and Career Aspirations would differentiate between a person who is more successful in their career and a person who is less successful in their career is valid. The GPA, Self-Efficacy, and Career Aspirations can be used as the predictors to discriminate the two groups. A more successful person was expected to have aspiration towards the Pure Challenge, Lifestyle, and Entrepreneurship variables. The good fit model was also confirmed by logistic regression and confirming the role of Pure Challenge and Lifestyle.

Since the respondents had this job as their first job, this model can also be used for preparing the first job to develop certain aspiration to achieve the success in the future.

This model can also be used as career success predictor for Generation Y, since the profile of respondents fall into the generational cohort year and the result have been supported by several researches explaining the characteristic of Generation Y.

This research can be used to initiate future research to overcome its limitations (1) The definition of career success for the first job can be sharpened by adding more dimension into career success. Friedman and Greenhaus (2000) established 5 dimensions of career success such a status, time for self, challenge, security and social. Dries et al. (2008) incorporated a series of vignettes in the online survey to evaluate the “career success”. IQ and EQ may be included in the future research to get more comprehensive results besides academic achievement; (2) Future researchers may want to cooperate with corporations or schools to get the exact salary or grade of the respondent to increase accuracy; (3) The application of different research methods may give different result.
The findings of this research support the claim that academic achievement was not the only factor which contributed to career success. Self-efficacy, and career aspirations play a role in the career success. And since the research involves Generation Y as the primary target respondents with the facts that they were the newest generation entering the work force or related with the subject of this research the first job, this research can have managerial implications especially with the issue to retaining the Generation Y’s workforce and developing the talents. 

1) Professional workers should build their ‘Pure Challenge’, ‘Managerial’, ‘Lifestyle’ and ‘Entrepreneurship’ skills. Companies may train or support their employees toward the expected aspirations to improve company performance. 

2) Generation Y are keen to be challenged but also they would like to keep their freedom. For the companies with a high number of the first job employees might consider the flexible hour to retain this young talent; 

3) The perception of frequent changing job among this generation might be related with the Lifestyle anchor with the interpretation that this generation chose job which fit with their lifestyle. Balancing work and life, connecting with the social sensitive issues are among of the examples on how to keep this generation in the company; 

4) In terms of developing the talents, according to Shaw and Fairhurst (2008), this Generation Y’s desire to understand their roles and tasks in the organization and seek early feedback suggests a tailored approach such as early assignment of mentoring or coaching for the first graduate will be helpful as this generation look for candid perspectives and genuine support (Sayer, 2007); 

5) Shaw and Fairhurst (2008) also stated that this Generation Y prefers doing than listening. The lateral movement can help broadening their knowledge, experience and experience as they move their career. 

Besides the companies, the education institution should also redefine their learning experience during the school time. Schools should try to build the mindset of the students and try to nurture their self-efficacy and career aspirations especially for ‘Pure Challenge’, ‘Lifestyle’ and ‘Entrepreneurship’. Connecting the school with the companies and other professional organization can help both school and students to prepare themselves in the workforce market. With the character of learning by doing from this Generation Y, internship and doing projects with companies will nurture the anchor of ‘Pure Challenge’ and ‘Entrepreneurship’. Connecting school with any social projects is a medium for nurturing the positive ‘Lifestyle’ anchor.

REFERENCES
The Predictors of Career Success for a First Job


