# The Effect of Leadership Attributes and Motivation to Lead on Preferred Job Characteristics (Job Attributes): Case Study of Undergraduates in Malaysian Universities

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**Abstract**

The objective of this study was to examine the relationship between the leadership attributes and motivation to lead (MTL) of undergraduates in Malaysia with their inclination to choose specific types of job characteristics or job attributes. Many researches has proven that personality is positively related to preferred job characteristics, but no research to the researchers' knowledge has been done on leadership attributes and motivation to lead with selected job characteristics. Data were collected from 711 undergraduates from Malaysian public universities. The results showed that leader attributes contributes a stronger predictive effect than the motivation or keenness to lead in determining the selection of specific job characteristics. This finding supports the research hypothesis that undergraduates who have been exposed to leadership training and development have gained greater emotional and cognitive maturity that enable them to be more open to a broader range of job characteristic types. No significant difference was observed between males and females, nor between Science and Humanity programs of study in the students' selection of specific job characteristics. Findings, implications and directions for research are discussed.

**Keywords:** leadership attributes, job characteristics, motivation to lead, work fit, undergraduates

## 1. Introduction

University students in Malaysia who enter the university either directly from secondary school or from college preparatory programs or diploma programs generally range from 18 to 24 years old. Undergraduates who are 25 years old and above are adult students who usually have taken decisions to re-pursue education in the university after a break from academic or a brief spell of employment. Literature has categorized 16 to 24 years of age as adolescents (Schunk & Meece, 2005; Twenge, 2010), although Arnett (2004) classifies the years from age 18 to 24 as the "emerging adulthood". Indeed, the developmental period between adolescence and young adulthood has become increasingly blended and more protracted (Arnett, 2000; Furstenberg, Rumbaut, & Settersten, 2005) since young people remain in school longer. As more youths gain open access to tertiary level education, they try to support their expenses by combining education and work (Frone, 1999; Loughlin & Barling, 2001; Wray-Lake, Syvertsen, Briddell, Osgood, & Flanagan, 2009), but many would still have to be relatively dependent on family resources when their income from part time or temporary jobs is not sufficient to support both living and educational expenses. Home and family continue to be an important if not a major socialization routine during the stage late adolescence into young adulthood (Fussell & Furstenberg, 2005; Marcia, 1980).

During adolescence, value development takes place and it is through values that self-identities are formed (Flanagan, 2003a). Adolescence is an important time for identity formation (Porfeli, 2007).Values provides adolescents with guideposts and a schema to make sense of their experiences and interaction with other people (Flanagan, 2003b). For university students, their experience, observations and interactions are rich sources of input as they form and consolidate their values and identities (Bandura, 1989). Astin's (1993) model of inputs-environments-outcomes posits that institutional practices and environmental experiences have impact on students' outcomes. Through interaction with faculty members, undergraduates learn to assess personalities and life values and choose their role models (Gilbert, 1985); through engagement with tasks they develop broader

perspectives of issues and competencies (Kempster & Cope, 2010; Plumly et al., 2008); through student participation and empowerment they learn about the values and causes they would like to continue to uphold and invest in their time and energy (Komives, Lucas, & McMahon, 2007; Plumly et al., 2008), and through peer interaction they discover interpersonal skills in the midst of diversity (Gurin, Nagda, & Lopez, 2004; Hurtado, 2001; Laird, 2005)and the value of networking and shared goals (Zimmerman-Oster & Burkhardt, 1999). One of the fundamental experience these youths undergo is leadership be it leadership of self, of others, or through others. Universities as instruments for social change have a social responsibility of developing civic leaders and productive citizens (Antonio, Astin, & Cress, 2000). Through involvement in various programs, students develop their awareness of the importance of leadership and how leadership is performed. During this phase of their academic life in the university they are expected to be independent and show initiatives attain self-leadership, and develop leadership with others during group projects (E. Pascarella & Terenzini, 1991). Pascarella (2006) remarks that since the 1970's, research have provided are markably clear picture of the long term contributions of post-secondary education to individual's life values, personnel life after college and to their labor market success (e.g., Baum & Payea, 2005; E. Pascarella & Terenzini, 1991; Rowley & Hurtado, 2003). This tells us that college or university education make deep impressions on how the individual develop respond and make decisions about his or her life and career choices.

As youths become more aware of the values and skills they are now developing, they begin to realize potential careers which match their values, and they begin to see work as a source of their future identity formation (Porfeli, 2007; Schulenberg, Vondracek, & Kim, 1993; Shanahan, 2000; Twenge, 2010). Indeed, youths in late adolescence at the post-secondary education level spend considerable part of their time planning on their future work (Arnett, 2004; Shanahan, 2000). Their emerging sense of work values, that is, values that they anticipate in their future careers and values that they bring to their future, figure importantly into their identity development (Hamilton & Hamilton, 2006).Theories of occupational choice (Holland, 1966), and the theory of work adjustment (Dawis, 1994) revealed that people choose to place themselves in work environments that "fit" their expectations so that they are more able to intrinsically enjoy their work. People placed in work environments that "fit" with their life goals and values are more likely to intrinsically enjoy their work and remain with an organization (Westerman & Yamamura, 2007).

The work adjustment fit theory suggests that theoretically speaking, undergraduates who have developed leadership qualities and have motivation to lead would seek occupations whose work environment encouraged attributes of self-initiative and leadership ability. However, there are few studies which examine how undergraduates' leadership skills affect the kinds of careers they would aspire to seek in the future. Related studies such as by Kuhn & Weinberger (2005) gives evidence that individuals who exhibited leadership propensities while they were in high school had greater likelihood to occupy managerial positions as adults; they tended to earn significantly more about 10 years later; and that this greater economic return to leadership skills seemed to occur more frequently within managerial occupations versus other types of occupations. Kuhn used three data sets of the national population of high school students in 1960, 1972, and 1982 in United States. Controlling for the effect of cognitive ability and family background, Kuhn's study confirmed that leadership the ability to lead other people in high schooled to occupational outcomes down the road.

We think that it is important to examine to what extent undergraduate's leadership attributes and motivation to lead influence the kinds of job characteristics that they seek in their future employment. We have known for some time from needs-press theory (Murray, 1938) and person-organization work fit theory people placed in work environments that "fit" with their life goals and values are more likely to intrinsically enjoy their work and remain with an organization(O'Reilly, Chatman, & Caldwell, 1991). For instance, Westerman & Yamamura (2007) study found a high relationship between the level of person-organization fit and job satisfaction and intention to remain with an organization. People's individual needs and values also impact on their occupational choice (Holland, 1966). If Kuhn's work be taken for the basis of this prediction, then we anticipate that undergraduates with strong leadership attributes and desire to lead may prefer managerial types of tasks, or more autonomy for decision-making as opposed to jobs that placed emphasis on group-dynamics and group accountability.

Krauss & Hamid (2013) found that undergraduates with high leadership skills tended to enjoy being involved in many activities, which leads us to a possible hypothesis that they would also seek for jobs that allowed much room and flexibility for them to move across task types. They also found that student leaders in campus were more comfortable in communication and relationships with the higher authorities at the faculty and university (Hamid & Krauss, 2010). Zimmerman-Oster and Burkhardt (1999) found that student leaders or students who have had leadership experience tended to appreciate the depth and extent of building networks of alliances. Debnath,

Tandon and Pointer (2007) found out that those individuals having leadership skills and are motivated as leaders tend to look for more complex job characteristics.

Hence, the purpose of this study is to investigate the relationship between leadership attributes and motivation to lead among Malaysian undergraduate students and their preferred choice of job characteristics. The effect of two variables that is, gender and program of study were also examined.

## 2. Method

### 2.1 Participants

Four public universities in Malaysia were randomly chosen to represent the north, south, east and west zones of the peninsular. A total of 800 questionnaires were randomly distributed at the rate of 200 questionnaires per university to faculty clusters offering Science based programs and social science and humanities programs.764 questionnaires were returned (response rate 95.5%). Of these, 53 questionnaires were excluded from the analysis due to incomplete data, leaving only 711 response fit for analysis. The majority of students who responded to the survey was female (79.3% or N=564) while male students constituted 20.7% or N=147. About 53% or N=379 were students from the Science faculty cluster including Engineering, Mathematics and Science, and Medical Science. The other 47% or N=332 were from Social Science and Humanities faculty cluster including Education, Languages, Human Resource, Business Management, Economics, Marketing, and IT.

### 2.2 Measuring Instruments

The study is a correlational study with inferential analysis. Data is collected through survey questionnaires which were hand delivered to undergraduates in randomly selected classrooms from a random mix of faculties in four public universities in Malaysia. The questionnaire comprised three sections: (1) a Leadership Attribute section (2) a Motivation to Lead section (MTL) and (3) a Job characteristics section. The Leadership Attribute section contained nineteen items which were developed by the researchers using the existing literature as a guide. The Leadership Attributes comprised measuring Visionary leadership (5 items); Group Leadership (7 items), Leader responsibility & Identity (4 items), and Leader Emotional Stability(3 items).The Motivation to Lead section (MTL) was adapted from Chan and Drasgow's (2001) inventory of 9-items on Affective Motivation to Lead but only six items were used in this study. The Job characteristics section contained measures that were partially adapted from five basic job characteristic constructs suggested by Hackman and Oldham (1975). The original characteristics were task variety; task identity; task significance or meaningfulness; autonomy; and feedback. Our new job characteristics section comprised 25 items spread in the following constructs: Autonomy in Job (3 items), Authority in Job (3 items), High pay (3 items), Recognition/award (4 items), Collegial Respect (4 items), Job Social Status (3 items), and Job Meaningfulness (5 items).These constructs were deemed more transparent to Malaysian undergraduates. All items on the Leadership Attribute, MTL, and Job Characteristic scales were measured based on a 5-point Likert scale that ranged from 1='Strongly Disagree', 'to 5='Strongly Agree'.

The survey questionnaire was piloted, and the Cronbach alpha coefficient obtained for all three sections from the pilot were acceptable (above .70). According to Fraenkel, Wallen and Hyun (2012) Cronbach's alpha ($\alpha$) value of > 0.7 is acceptable. The next section reports the findings from the actual study.

## 3. Results

The mean, standard deviation and alpha scores for leader attributes, motivation to lead, and job characteristics are listed in Table 1. The overall mean scores for Leadership Attributes was4.01, SD=.48; and for Motivation to lead 3.44, SD=.82. Amongst the job characteristics, the highest mean score was obtained for job meaningfulness (M=4.41; SD=.48), followed by recognition in job (M=4.33; SD=.55), job autonomy (M=4.30; SD=.61), collegial respect (M=4.10; SD=.57), and job social status(M=4.09; SD=.75). Two high moderate ranking job characteristic were high pay (M=3.74; SD=.80) and job authority (M=3.87; SD=.66).

Table 1. Descriptive analysis of leader attributes, motivation to lead and job characteristics (n=711)

|  | Alpha score | Mean | SD | Range |
|---|---|---|---|---|
| Meaningfulness of job | .70 | 4.41 | .48 | 2.60 |
| Award/Recognition | .75 | 4.33 | .55 | 3.33 |
| Collegial respect | .68 | 4.10 | .57 | 4.00 |
| Job Autonomy | .81 | 4.30 | .61 | 3.00 |
| Job Authority | .77 | 3.87 | .66 | 3.50 |
| High Pay | .69 | 3.74 | .80 | 4.00 |
| Job Social status | .72 | 4.09 | .75 | 4.00 |
| Overall Leader Attributes | .90 | 4.01 | .48 | 2.68 |
| Group leadership | .84 | 4.19 | .52 | 2.86 |
| Leader Role& Identity | .86 | 3.90 | .75 | 4.00 |
| Emotional stability | .71 | 3.92 | .66 | 4.00 |
| Motivation to lead | .89 | 3.44 | .82 | 4.00 |

In Table 2, it showed that having Leadership Attributes was significantly but moderately associated to liking jobs that promised autonomy, authority, social status, and collegial respect, meaningfulness of job, and recognition and award for achievement. The least of preferred job characteristic was social status (r.34, p<.01). But having leadership attribute was not related to a liking for jobs that offered high pay (r =.07, p>.05). The scenario with motivation to lead was a pale shadow to leadership attribute. The relationship between MTL with all job characteristics was significant but almost of these were low relationships. The highest correlation were observed between MTL with job authority (r=.49, p<.01), which was moderate. The relationship between MTL with high pay was the weakest, but nevertheless significant (r=.10, p<.05). At a glance, it appears as if the acquisition of strong leadership attributes in oneself seems to clarify the types of work environment characteristics one would prefer to have. Having good Leadership Attributes meant a more open and wider acceptance of job characteristics that were both intrinsic and extrinsic (except for high pay). On the other hand, wanting to have a more active leadership role (MTL) appears to be coupled particularly highly with the desire for authority, hence the preference for jobs that offered authority.

Table 2. Correlations between leader attributes, MTL and job characteristics

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1 Autonomy | - | | | | | | | | |
| 2 Authority | .55** | - | | | | | | | |
| 3 High pay | .14** | .25** | - | | | | | | |
| 4 Social status | .23** | .29** | .23** | - | | | | | |
| 5 Collegial respect | .49** | .67** | .18** | .32** | - | | | | |
| 6 Meaningfulness of job | .53** | .31** | .12** | .30** | .50** | - | | | |
| 7 Award and recognition | .53** | .45** | .28** | .28** | .59** | .59** | - | | |
| 8 Leader Attributes | .40** | .43** | .07 | .34** | .49** | .49** | .41** | - | |
| 9 MTL | .16** | .49** | .10** | .20** | .36** | .13** | .13** | .58** | - |

*Note.* * $p = .05$. ** $p = .01$.

Next, multiple linear regression analysis was used to examine whether Leader Attributes, MTL, gender, and program of study predicted preference for each job characteristics. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicolinearity and homoscedasticity. All of the four variables were simultaneously entered into the analysis to determine which of the variables contributed most to the overall variance for each job characteristics, which was the dependent variable. The standardized regression coefficients (ß) were used to enable direct comparisons is made of the relative strengths of relationships between predictors and dependent variables (Mertler & Vannatta, 2001) in each of the regression model. Table 3 shows the results. The total explained variance, $R^2$, is illustrated at the bottom of each model.

Table 3. Multiple regression of job characteristics with leadership attributes (LA), motivation to lead (MTL), gender, and program of study as predictors (N=711)

| Job characteristic (dependent factor) | | B | Std. Error | Beta | t | Sig |
|---|---|---|---|---|---|---|
| | (Constant) | 2.254 | .177 | | 12.712 | .000 |
| | LA | .579 | .053 | .461 | 10.935 | .000 |
| Autonomy | MTL | -.080 | .031 | -.109 | -2.580 | .010 |
| | Gender | -.031 | .052 | -.020 | -.594 | .553 |
| | Study program | .002 | .042 | .002 | .046 | .963 |
| $R^2$ .169df(4,706)= 35.788 | | | | | | |
| | (Constant) | 1.684 | .180 | | 9.338 | .000 |
| | LA | .298 | .054 | .219 | 5.541 | .000 |
| Authority | MTL | .284 | .032 | .355 | 8.999 | .000 |
| | Gender | -.028 | .053 | -.017 | -.539 | .590 |
| | Study program | .029 | .043 | .022 | .670 | .503 |
| $R^2$ .268df(4,706)= 64.736 | | | | | | |
| | (Constant) | 3.257 | .251 | | 12.951 | .000 |
| | LA | .044 | .075 | .027 | .583 | .560 |
| High pay | MTL | .093 | .044 | .097 | 2.126 | .034 |
| | Gender | .222 | .073 | .113 | 3.028 | .003 |
| | Study program | -.107 | .059 | -.067 | -1.804 | .072 |
| $R^2$ =.028df(4,706)= 5.079 | | | | | | |
| | (Constant) | 1.964 | .224 | | 8.752 | .000 |
| | LA | .512 | .067 | .332 | 7.638 | .000 |
| Social status | MTL | .007 | .039 | .007 | .172 | .864 |
| | Gender | .016 | .065 | .008 | .238 | .812 |
| | Study program | .088 | .053 | .059 | 1.656 | .098 |
| $R^2$= . 118df(4,706)= 23.692 | | | | | | |
| | (Constant) | 1.784 | .159 | | 11.210 | .000 |
| | LA | .501 | .047 | .422 | 10.553 | .000 |
| Collegial respect | MTL | .078 | .028 | .112 | 2.800 | .005 |
| | Gender | .009 | .046 | .007 | .205 | .838 |
| | Study program | .065 | .038 | .056 | 1.725 | .085 |
| $R^2$=. 252 df(4,706)= 59.409 | | | | | | |
| | (Constant) | 2.395 | .132 | | 18.161 | .000 |
| | LA | .614 | .039 | .616 | 15.607 | .000 |
| Meaningfulness of job | MTL | -.135 | .023 | -.230 | -5.844 | .000 |
| | Gender | -.004 | .038 | -.003 | -.100 | .920 |
| | Study program | .038 | .031 | .040 | 1.226 | .220 |
| $R^2$ . 272 df(4,706)= 65.903 | | | | | | |
| | (Constant) | 2.423 | .160 | | 15.153 | .000 |
| | LA | .570 | .048 | .498 | 11.935 | .000 |
| Award/ recognition | MTL | -.107 | .028 | -.159 | -3.815 | .000 |
| | Gender | -.058 | .047 | -.042 | -1.245 | .214 |
| | Study program | .005 | .038 | .004 | .124 | .901 |
| $R^2$ . 187 df(4,706)= 40.555 | | | | | | |

*Note.* p<.01, p < .05.

Collegial Respect (Adjusted $R^2$= .252); Job Authority (Adjusted $R^2$= .268); and Meaningfulness of Job (Adjusted $R^2$= .272) showed the uppermost regression models of moderate strength. These are followed by weaker models: Award/Recognition in Job (Adjusted $R^2$=.187): Job Autonomy (Adjusted $R^2$= .169); and Social status (Adjusted $R^2$=.118). The regression model for High Pay showed only minute importance (Adjusted $R^2$ effect of .03).

The models confirmed that students' LA and MTL were the two concurrent, most consistently significant factors in predicting students' preference for all job characteristics, except in two cases. These exceptions were: (1) High Pay, where LA did not significantly predict High Pay; and (2) Job Social Status where MTL did not

significantly predict Job Social Status. These two exceptions seem to suggest that job social status but not high pay mattered to undergraduates who had good leadership attributes; but those who had strong motivation to lead preferred jobs that offered high pay and were least concerned with the social status of the job. High pay and social status appear to represent different sources of work rewards, and they appear to be mutually exclusive between people who have leadership qualities and those who seek to actively exercise their leadership.

Albeit being significant predictors in most models (except High Pay and Social Status), LA and MTL behaved differently. LA contributed a larger predictive effect in all of the preference for job characteristics, except for the preference of Job Authority, where the t value of MTL was the largest at 8.999 $p<.01$. The t-values of LA in Meaningfulness of Job was 15.607 $p<.01$; Award & Recognition in Job 11.935 $p<.01$; Autonomy 10.935 $p<.01$; Collegial Respect 10.553 $p<.01$; Job Social Status 7.638 $p<.01$ and Authority 5.541 $p<.01$. The t-values of MTL were much smaller, with the largest t-value only for Job Authority.

In reference to personal factors, it was found neither gender nor program of study were significant predictors to preference of any of the job characteristics except in one case whereby gender was a significant predictor for the preference of High Pay (t= 3.028, standardized $\beta$ = .113 $p <.01$).

## 4. Discussion

This study confirmed our research hypothesis that Leader Attributes (LA)and Motivation to Lead (MTL) were significant predictors to almost all job characteristics except in the case of High Paying jobs and Job Social Status ($p>.05$). However, LA and MTL behaved differently. Excluding the High Pay and Social Status job characteristic models, it was observed that in the presence of LA, the contribution of MTL in predicting preference for all job characteristics appeared smaller except in preference for Authority in Job. The findings seem to suggest that the development of generic leadership attributes amongst undergraduates' benefits them in helping them to be receptive to more quality job characteristics. Undergraduates who have leadership qualities demonstrate affinity for job characteristics that offered meaningfulness in the jobs, followed by recognition/reward for ability, autonomy in job, supportive collegial relationship within their job environment, social status of job, and least of all to authority in job. The t-value of MTL for job Authority superseded LA by a large margin which seems to confirm that the undergraduates perceived authority in job as a source of power to enable one to exercise active leadership (Hamid & Krauss, 2013), and hence more desirable by those who intended to have more active role as leaders. MTL also significantly predicted preference for high paying jobs which by tradition is often associated with positions of higher authority in any organization. Monetary reward could also have been regarded as a source of leadership power or influence, and it appears to be more attractive to people who want to play active leadership roles. High Pay and Job social status do not appear as synonymous job characteristics. In fact, high pay and job social status appear to represent different sources of work rewards. Social status of jobs could be the outcome of the individual's commitment in making contributions to benefit or develop the organization or society, or professional discipline (Astin & Astin, 2000; Pintrich & Schunk, 1995).

It seems that the Leadership Attributes used in this study which were mainly based on transformational leadership attributes (visionary leadership; ability to encourage group cohesion and lead group; willingness and ease in accepting leadership role, responsibility and leadership identity; and having personal emotional stability to foster consistency in one's relationship to others and in the work environment) cultivated commendable preference for quality characteristics inherent within the jobs such as for instance, the meaningfulness of the job. Inversely, the motivation to become active leaders appeared to cultivate more interest in extrinsic qualities of the job, namely high pay and authority, and lower interest in the intrinsic qualities of the job.

Studies have found that students of different gender and in different program of study espouse different sets of work values (Abu-Saad & Isralowitz, 1997; Avi-Itzhak & Ben-Shem, 1993; Balsamo, Lauriola, & Saggino, 2013; Cassar, 2008) but no study to the researchers' knowledge has been carried out to examine the relationship between programs of study with preference of job characteristics. Our study showed that programs of study posed no significant influence on choice of job characteristics. This suggests that the pattern of preference of job characteristics is common and cuts across fields of program specializations, and also across gender, except in High Pay. Although there are many empirical reports of women assigning higher value to intrinsic job aspects (Sagie, Elizur, & Koslowsky, 1996), but there are evidences that economic conditions as well as growth in female worker numbers have contributed in reducing gender differences in male and female work values (Rowe & Snizek, 1995); occupational interest (Hansen, 1988), and job attribute preferences (Gomez, 2003).

## 5. Conclusion

As a conclusion, the study depicts the selection of specific job characteristics' is very much influenced by leader attributes. Exposure to leadership training and development will help undergraduates to possess wider emotional

and cognitive maturity. Besides, having leadership attributes and having the desire/motivation to lead appear to be mutually reinforcing in determining preferences of most job characteristics, but the nature and magnitude of their influence are different. Universities need to consider developing more leadership attribute development workshops for their undergraduates to enable them to gain higher cognitive maturity and cultivate preference for broader job quality characteristics.

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