

Unraveling the Mediating Role of Self-Management Strategy Implementation in the Goal-Setting and Psychological Success Linkage

Tan Fee Yean, Johanim Johari and Edora Ismail
School of Business Management, College of Business, Universiti Utara Malaysia,
Kuala Lumpur, Malaysia

Abstract: The main purpose of this research is to determine the mediating role of self-management strategies in explaining the link between goal-setting and psychological success among academicians of Malaysian public universities. Underpinned by the Goal-Setting Theory, this research posited that goal-setting exerts a significant impact on the implementation of self-management strategies (i.e., extended work involvement, creating opportunities, self-nomination, seeking social support and interpersonal attraction) which in turn helps to attain high level of psychological success. Data was gathered through questionnaire survey of 256 academic staffs from eight public universities located in the Peninsular Malaysia. Through Partial Least Squares Structural Equation Modeling (PLS-SEM), the results found that goal setting is the driving force for academic staffs to creating opportunities that will ultimately enhance their psychological success. Discussions elaborated on the research findings are presented while the theoretical and practical ramifications of this research are also brought to fore.

Key words: Goal-setting, self-management strategies, psychological success, academic staffs, PLS-SEM

INTRODUCTION

There has been increasing interest in the careers of university academicians over the last few years. The growing interest stems, in part from the recognition of the World Bank (2008) that “education” is one of the parameters in the knowledge economy index. The knowledge-intensive sectors such as universities have been found to have more economic values since universities can be considered as innovation centers, research centers, training centers, consultancy agencies that consist of large groups of educated and well-trained individuals who create and share knowledge through new technologies for the purpose of commercialization and wealth creation (Arokiasamy *et al.*, 2011). An important group of this educated and well-trained individual in universities is the academicians who comprised mainly of lecturers, senior lecturers associate professors and professors. They are also generally known as knowledge workers or k-workers because academics are very well-versed with the utilization of knowledge and information as strategic resources for commercialization purposes in all socio-economic activities.

As indicated by the Ministry of Science Technology and Innovation (MASTIC, 2010), Malaysia is currently moving towards being a knowledge-based economy (k-economy) by focusing on the development of

the country’s capacity for increasing competencies, creativity and innovation. The ability of human resources to generate new knowledge and technology for commercialization is the key predictor in determining the success of a k-economy (MASTIC, 2010). Hence, academicians of Malaysian public universities who are involved in the conception and creation of new knowledge, theories, models, practices, systems and methods can be considered as one of the important groups of human capital to contribute to the k-economy.

The above discussion shows that academicians are one of the key resources for a country to develop a k-economy. Therefore, the issues of career management of university academicians need to be highlighted as it can directly impact academicians’ commitment towards their job responsibilities and indirectly affect universities’ ability to generate new knowledge and technology required for a k-economy. However, managing the academicians’ careers is becoming more difficult and complex due to following reasons:

- In place of the well-known concept of career self-management, universities are more likely to pursue a Human Resource (HR) policy that puts more accountability for career management on the individuals instead of on the university

- Reluctance of university's management to make the necessary resources (e.g., financial and physical facilities) available and to support academicians in managing their careers

Hence, there is a dire need to perform an empirical study to understand how academicians strive for psychological success based on their personal efforts. This is significant to be studied since efforts of academicians to realize their career aspiration have a bearing on the university's performance. Therefore, this research is specifically conducted to enrich the growing body of knowledge in career self-management domain and to identify which types of self-management strategies are adopted to ensure an academician psychological success.

Literature review

Psychological success: In the context of careers, psychological success can be defined as the level of one's satisfaction towards his/her wealth and needs achievement. Past studies such as Hall and Chandler (2005) and Heslin (2005) have generally agreed that psychological success is a form of subjective construct which is can be referred to as emotional reactions of one towards his/her own career achievement and is most commonly recognized as job or career satisfaction. Therefore, psychological success can be determined through one's sense of satisfaction with reference to intrinsic indices such as personal goals and needs fulfilment (Nabi, 1999). According to Nabi (2001), psychological success is complex to understand since it depends on an individual's personal perception towards their accomplishment which is very difficult to observe and measure in objective terms such as salary. Further, Nabi (2001) found that some of the individuals, despite having low salaries, can still feel satisfied towards their careers due to other reasons such as flexible work schedule, excellent work environment, strong team spirit among team members and challenging tasks. Thus, a high salary can enhance one's social status but it is not the only requirement for individuals to be succeed in their career. Individuals with high psychological success will feel satisfied and happier about their careers relative to their own expectations.

Goal-setting Goal-setting is a process of identifying personal aspiration that to be gained in future. As indicated by Cairo (2006), a life without goal-setting is just like a car without a steering. This means without having career goals, individuals will lose direction in their life and may not be able to steer their efforts in the right direction.

Table 1: Types of self-management strategies

Self-management strategies	Definition
Creating opportunities	Developing skills and expertise that are critical to one's career achievement
Extended work involvement	Working outside of normal working hours
Self-nomination	Communicating to superiors a desire to assume greater responsibility in the organization
Seeking social support	Getting support and advice from experienced people either inside or outside the organization
Interpersonal attraction	Holding a sound opinion and expressing a favourable evaluation of the superior

Chang (2002), Gould and Penley (1984), Yean and Yahya (2011)

Chang (2002) revealed that specific goals (e.g., aim to become an Associate Professor within 3 year) can lead to better outcome than vague goals (e.g., aim to get promotion). Therefore, career goals should be specific and in a clear form to establish how, when and what the individual wants to accomplish. In addition, career goals should not be just talked about but should be written down (Rouillard, 1993; Wilson, 1994; Cairo, 2006). This would enable the individuals to review how well they are doing now as compared to in the past. Further, career goals should be flexible (i.e., can be adjusted according to the changing conditions) realistic (i.e., can be achieved within the person's ability) and have a set timeframe (i.e., have a deadline) so that the individual can regularly anticipate and take necessary actions to achieve the desired outcomes.

Self-management strategies: Self-management strategies are tactics that individuals take to shorten the time required to attain their career aspiration (Gould and Penley, 1984). Individuals will perform self-management strategies to control their career situation so as to help them achieve career objectives. Lau and Pang (2000) and Kuo (2006) agreed with this point of view by defining self-management strategies as a sequence of activities designed by individuals to achieve their career goals in an organisation. Specifically, self-management strategies are tactics that can be used by individuals to eliminate obstacles in the pathway to attain their career objectives. Past studies such as Gould and Penley (1984) have identified the types of tactics (i.e., developing skills and expertise, working outside of office hours, nominating oneself to assume greater responsibility, getting support from experienced person, extending networking within and outside the organization, agreeing immediate superior's opinion and expressing favourable evaluation of immediate superior) that individuals use to enhance their career achievement. Those tactics can be categorized into five main types of self-management strategies as depicted in Table 1.

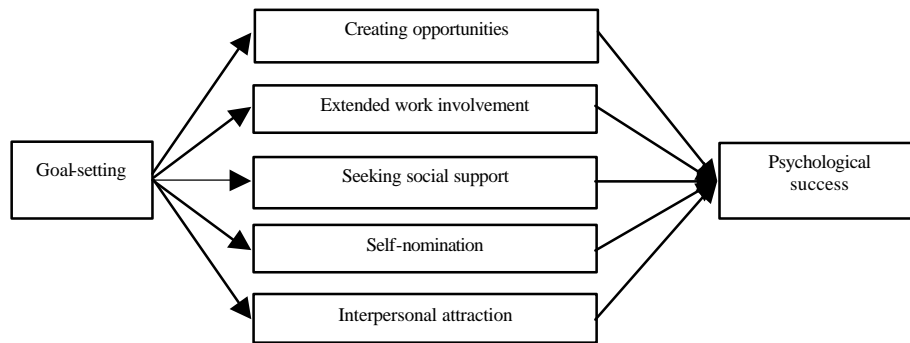


Fig. 1: Research framework

Research framework and hypotheses: Figure 1 depicts the research framework that contains seven constructs, namely goal-setting, creating opportunities, extended work involvement, seeking social support, self-nomination, interpersonal attraction and psychological success. The research framework is formulated based on the proposition of Goal-Setting Theory. As indicated by Goal-setting Theory, a primary influence on individuals' self-management strategies is the identification of personal goals (Locke and Latham, 1990). Chang (2002) proposed that a clear and specific goal needs to be supported by appropriate strategies. This is because career goals can provide individuals with a clearer view of what they want to achieve in the forthcoming years and this had trigger their intention to implement particular strategies to attain the goals. This means once individuals had identified their career goals, the next step is the implementation of a self-management strategy. Self-management strategies then represents specific tactics that an individual undertakes in attempting to attain career goals (Aryee and Debrah, 1993). As a result of the goals achievement, an individual experiences an increased satisfaction that is high level of psychological success. As stated by Locke and Latham's (1990), the desire of an individual to attain career goals had act as a motivational mechanism to spur him/her to initiate necessary actions (i.e., involvement in a self-management strategy) to attain his/her career goals. Therefore, the implementation of a strategy will enhance the possibility of an individual to gain his/her career development needs. And the achievement of an individual's career goals will promote his/her psychological success.

As indicated by Gould and Penley (1984), individuals who made greater use of self-management strategies were experiencing greater psychological success in their careers than those who were not. This point of view also supported by the studies of Chang (2002), Kahnweiler

(2006), Akrivos *et al.* (2007) and Bozionelos (2008). Similar point of view was also found in the studies of Nabi (2001, 2003) where self-management strategies were considered as one of the key predictors of individuals' psychological success. Individuals who are engaged in a self-management strategy such as networking with external social groups can gain several important benefits including expanding career mobility, easier access into the social structure and building beneficial relationship with significant people, who can help them to further their career progression. Gould and Penley (1984) further advocated that working longer hours, conveying a positive and acceptable image to superior by making them aware of one's accomplishment and conforming to superiors' opinions are important for employees to influence their superior's decision when assigning significance assignments for them. If superiors have positive impression about an employee, they will be more likely to ask him or her to take over the assignments, thus indicating relatively high chances in gaining better career performance that will result in greater psychological success.

Past studies such as Chang (2002) and Nabi (2003) also proposed that the tactics of continually developing marketable skills and expertise are useful tools for individuals to preserve their employability and marketability. Knowledge, skills and expertise which are aligned with the employer's needs can ensure individuals' career progression and performance. For example, in this era of Information and Communications Technology (ICT) where there is a constant evolution of tools such as computer software and hardware, employees need to constantly update their skills and knowledge. If they are unable to keep up-to-date with the current skills and knowledge needed by the employers, they might not be able to carry out the assigned tasks well and thus achieve low performance that will affect their psychological success.

In line with the empirical and theoretical evidences, a priori proposition was made that individuals are satisfied with their careers if they are involving in career planning actions and implement a strategy that can further their career progression. Therefore, it is hypothesised that:

- H₁: Goal-setting would exert a positive influence on self-management strategies
- H₂: Self-management strategies would exert a positive influence on psychological success
- H₃: Self-management strategies mediate the relationship between goal-setting and psychological success

MATERIALS AND METHODS

Sample and procedure: The population of this research comprises academic staff of Malaysia's public universities. The samples are drawn from eight public universities located in the southern, northern, central and east coast regions of Peninsular Malaysia (i.e., two public universities randomly selected from each region of Peninsular Malaysia). The sample of this research only includes full-time academic staffs who have been working for a minimum of 2 year. This is based on the assertion by Bozionelos (2003) that the job tenure of 2 year or more is an ideal point to evaluate employees' perception of their career experiences, since they had the time to familiarise themselves with the working conditions in their respective universities. Since, some Registrars of the public universities were unable to provide the accurate number of academic staff as per pre-determined criteria, the rule of thumb suggested by Roscoe as cited in Sekaran (2003) was used. He proposed that sample size should be several times (preferably 10 times or more) greater than the number of variables in a multivariate analysis. Since this present research has seven variables, thus the minimum sample size required is 70 (7×10). Besides that, G*Power 3.1.9.2 was also used to check the minimum sample size required for this research. A priori power analysis was performed with the effect size of 0.15 and the power of 0.80 (Cohen, 1988). The result showed that minimum sample size required is 92. However, to take care of non-responses that might affect the required sample size, this research decided to increase the sample size to 400 by dividing equally the number of questionnaires that is 50 set for each of the eight selected public universities. Out of 400 questionnaires distributed, 256 questionnaires were usable for further analysis which constitute of 64% response rate.

The respondents included 107 male and 149 female. Majority of the respondents were married (75.8%) and

most of respondents' age ranged from 36-45 years (42.9%). In terms of academic achievements, 127 respondents (49.6%) have Master's degree while 111 respondents (43.4%) have Doctoral degree. With regard to job position, 113 respondents are Lecturers while 103 respondents are holding the position of Senior Lecturer. Most of the respondents (41.8%) indicated that they have worked in the respective university for between 2-7 year.

Measurements: Measures for psychological success were adapted from Greenhaus *et al.* (1990). The 5-items psychological success scale measured academic staff's satisfaction towards his/her personal financial and non-financial goals achievement. Meanwhile, a five-item scale was also adapted from Gould (1979) to measure goal-setting. Besides that, the five dimensions of self-management strategies were measured using a 25-item scale adapted from Gould and Penley (1984). This 25-item scale determines the extent to which (1 = never to 5 = very often) academic staff had been engaged in each of the predetermined self-management strategies (i.e., creating opportunities, extended work involvement, self-nomination, seeking social support and interpersonal attraction). All the responses were made on a 5-point Likert-scale that ranged from (1) strongly disagree to (5) strongly agree except for self-management strategies.

RESULTS

Validity and reliability: Before performing validity analysis, the existence of common method bias was examined using the Harman's single factor test as suggested by Podsakoff and Organ (1986) and Podsakoff *et al.* (2003). The result indicates that the first factor captured 27.579% of the variance in the data which did not account for a majority of the variance. Hence, the common method bias does not appear to be a problem in this research.

Data was analysed using smart PLS 2.0. validity and reliability were tested through the measurement model. The measurement model was analyzed by few tests that consists of internal consistency (i.e., loading of each items), convergent and discriminant validity. Table 2 depicts the factor loadings of all observed variables which ranges from 0.653-0.922. One item of goal-setting (i.e., goal 1) was deleted from further analysis due to its low loading value which is <0.50. After factor loadings were gathered, Composite Reliability (CR) and Average Variance Extracted (AVE) were also used to measure convergence validity. As illustrated in Table 2, the value

Table 2: Results of measurement model

Model construct	Measurement items	Loading	CR	AVE	α
Goal-setting	Goal 2	0.702	0.872	0.632	0.805
	Goal 3	0.867			
	Goal 4	0.791			
	Goal 5	0.812			
	Opp1	0.743			
Creating opportunities	Opp 2	0.794	0.861	0.553	0.797
	Opp 3	0.737			
	Opp 4	0.785			
	Opp 5	0.653			
	Ext1	0.669			
Extended work involvement	Ext2	0.83	0.846	0.651	0.754
	Ext3	0.904			
Self-nomination	Nom 1	0.807	0.922	0.703	0.893
	Nom 2	0.825			
	Nom 3	0.915			
	Nom 4	0.895			
	Nom 5	0.739			
Seeking social support	Supp 1	0.675	0.873	0.58	0.819
	Supp 2	0.707			
	Supp 3	0.86			
	Supp 4	0.771			
	Supp 5	0.784			
Interpersonal attraction	Att1	0.755	0.905	0.577	0.885
	Att2	0.829			
	Att3	0.715			
	Att4	0.713			
	Att5	0.782			
	Att6	0.775			
	Att7	0.741			
Psychological success	Cs1	0.833	0.94	0.757	0.92
	Cs2	0.895			
	Cs3	0.826			
	Cs4	0.922			
	Cs5	0.871			

CR = Composite Reliability; AVE = Average Variance Extracted; α = Cronbach's Alpha

of CR for all variables were above the acceptable value of 0.70 (Hair *et al.*, 2010). In addition to fulfil convergence validity for all the measures, AVE for all constructs should be >0.50 as suggested by Barclay *et al.* (1995). As shown in Table 2, the AVE for each latent variable was greater than the threshold value of 0.50. Thus, based on the results, it can be concluded that the measurement model of all variables in this research demonstrated adequate convergent validity.

Besides that, the discriminant validity of the measurement items was tested through the criteria as suggested by Fornell and Larcker (1981). They suggested that the value of square root of AVE should be greater than the correlation coefficient of the two constructs to support discriminant validity. As indicated in Table 3, each square root of AVE is more than correlation coefficient, thus discriminant validity is established. This means that there is no multi-collinearity of items in representing their hypothesized latent factors. Table 3 also depicted that 27.4, 3.6, 17.2, 14.5 and 12.2% of the variance of interpersonal attraction, extended work involvement, self-nomination, seeking social support and creating opportunities were explained by goal-setting,

Table 3: Discriminant validity of constructs

Constructs	R ²	1	2	3	4	5	6	7
Goal-setting	-	0.795						
Creating opportunities	0.274	0.524	0.744					
Extended work involvement	0.036	0.189	0.196	0.807				
Self-nomination	0.172	0.415	0.489	0.273	0.838			
Seeking social support	0.145	0.381	0.458	0.217	0.566	0.762		
Interpersonal attraction	0.122	0.349	0.406	0.148	0.563	0.556	0.759	
Psychological success	0.153	0.3	0.379	-0.01	0.176	0.137	0.129	0.87

Diagonals (in bold) represent the square root of AVE while the other entries represent the correlation coefficients

Table 4: The result of the Q² values

Endogenous variables	Q ²
Creating opportunities	0.145
Extended work involvement	0.017
Self-nomination	0.119
Seeking social support	0.079
Interpersonal attraction	0.054
Psychological success	0.108

respectively. Meanwhile, 15.3% of the variance in psychological success was explained by the five dimensions of self-management strategies.

Test of hypotheses: Before testing the hypotheses, the predictive relevance (Q²) of the model was tested. To evaluate the predictive validity of a model using PLS, Q² was calculated via blindfolding procedure. As suggested by Peng and Lai (2012) if the Q² is >0 then the model can be viewed as having enough predictive relevance. The result in Table 4 showed that all endogenous variables have predictive relevance as all values are above 0.

The study hypothesized that goal-setting have the positive relationship with five dimensions of self-management strategies, namely creating opportunities, extended work involvement, self-nomination and seeking social support. The results in Table 5 showed that goal-setting had a significant and positive influence on all the dimensions of self-management strategies. However, only creating opportunities was found to have a substantial impact on psychological success ($\beta = 0.405, p < 0.001$). Therefore, H₁ posited earlier in this research was fully supported while H₂ was partially supported as indicated in Table 5.

To test whether self-management strategies (creating opportunities, extended work involvement, self-nomination, seeking social support and interpersonal attraction) significantly mediate the relationship between goal-setting and psychological success, bootstrapping, a nonparametric re-sampling procedure that does not impose the assumption of normality on the sampling distribution was used (Preacher and Hayes, 2008).

Table 5: Results of direct effect

Hypotheses	Relationship	Coefficient	t-value	Supported
H ₁	Goal-setting would exert a positive influence on self-management strategies	-	-	Yes
H _{1a}	Goal-setting-creating opportunities	0.524**	10.878	Yes
H _{1b}	Goal-setting-extended work involvement	0.189**	3.131	Yes
H _{1c}	Goal-setting-seeking social support	0.381**	6.902	Yes
H _{1d}	Goal-setting-self-nomination	0.415**	7.531	Yes
H _{1e}	Goal-setting-interpersonal attraction	0.349**	7.28	Yes
H ₂	Self-management strategies would exert a positive influence on psychological success	-	-	Partial
H _{2a}	Creating opportunities-psychological success	0.405**	5.254	Yes
H _{2b}	Extended work involvement-psychological success	-0.087	0.994	No
H _{2c}	Seeking social support-psychological success	-0.038	0.428	No
H _{2d}	Self-nomination-psychological success	0.035	0.361	No
H _{2e}	Interpersonal attraction-psychological success	-0.021	0.257	No

t-value; >2.33; Significant at **p<0.01

Table 6: Results of mediating effects

Hypothesis	Relationship	Indirect effect	t-value	Percentile bootstrap 95% confidence interval		Supported
				Lower	Upper	
H ₃	Self-management strategies mediate the relationship goal-setting psychological success	-	-	-	-	Partially
H _{3a}	Goal setting-creating opportunities-psychological success	0.212	4.421**	0.118	0.306	Yes
H _{3b}	Goal setting-extended work involvement-psychological success	-0.016	-1.028	-0.048	0.015	No
H _{3c}	Goal setting-self-nomination-psychological success	-0.014	-0.353	-0.095	0.066	No
H _{3d}	Goal setting-seeking social support-psychological success	0.015	0.415	-0.054	0.083	No
H _{3e}	Goal setting-interpersonal attraction-psychological success	-0.007	-0.244	-0.066	0.051	No

t-value; >2.33; Significant at **p<0.01

Bootstrapping (500 resamples) was performed to generate Standard Errors (SE) and t-statistics with the percentile bootstrap 95% confidence interval. If the confidence interval for a mediation hypothesis does not contain zero, it means that the indirect effect between independent and dependent variables is supported. The bootstrapping analysis (Table 6) found that only creating opportunities mediate the relationship between goal-setting and psychological success (indirect effect = 0.212; SE = 0.048; t-value = 4.421). Therefore, only H_{3a} is supported.

DISCUSSION

This research examined the mediating role of self-management strategy in explaining the empirical linkage between goal-setting and psychological success. The findings affirmed the notion that goal-setting has a direct effect on the implementation of self-management strategies. The results signified that academic staffs who have actively been engaged in goal-setting are more likely to implement a combination of strategies to achieve their career goals. These results are significant because they signify that academic staffs are likely to take charge by planning their own careers.

By having clear and precise career plans, academic staffs can strategize their career effectively by implementing several strategies that are beneficial to their career progression. Although, academic staffs perceived that utilization of combination strategies able to enlarge

their chances to attain goals but, in order to gain high level of psychological success, creating opportunities was a main strategy.

The findings of this research had found that out of the five types of self-management strategies, only creating opportunities were related to psychological success. This indicated that academic staffs who engage in the strategy of creating opportunities are more likely to attain high level of psychological success than those who do not. Developing marketable skills and expertise are considered essential and important for academic staff who have high job aspirations (Dawo *et al.*, 2012), especially since nowadays, the main responsibilities of academic staff are not limited to lecturing and supervising but also multi-roles as researcher, innovator, consultant, administrator, etc. Given various roles to be assumed by academic staffs, they have equipped themselves with multiple skills and knowledge to perform multi-tasks as stipulated by their Key Performance Indicators (KPIs). Therefore, they have to take more initiatives and be more aggressive to enhance their knowledge, skills and abilities via education and training programmes that can augment their ability to attain career goals. This in turn leads to a pleasing emotional state that is psychological success. In other words, academic staffs who had identified goals would steer their effort to engage in a strategy continuing developing marketable skills that are critical to career progression to enhance the chances to attain their career goals that will ultimately leads to greater experiences of psychological success.

CONCLUSION

From the aspect of theoretical implication, the findings of this research provide marginal support for the theoretical relationships proposed and Goal Setting Theory. Specifically, goal setting influences academician in developing skills and seeking out experience that is critical to their success which ultimately ensure their psychological success. Importantly, this research provides additional knowledge to the literature on career planning and further understanding on the antecedents of individual's psychological success.

The results of this research also provide some useful guidelines to the present and future academic staffs. This is crucial because academic staffs are currently provided limited resources by the university to support their career development needs. Thus, academic staffs must take charge of their own careers and not be too dependent on the university's support. This means academic staffs need to be proactive in seeking knowledge, enhancing skills and improving themselves in order to attain psychological success. Evidently, this is an effective strategy to ensure psychological success among academic.

From another viewpoint, the results of this research also provide some important insights to the Human Resource practitioners, particularly the Registrar's department of public universities. The Registrar's department of public universities should be realize that successfully facilitating academic staffs to manage their career will enhance academic staffs' commitment and be more likely to contribute towards university performance. Universities should not only make performance, remuneration and promotional information available for academic staffs but should also offer a more formal career management support such as mentoring, coaching, career counselling, career resources centre and information systems to assist academic staffs in managing their careers. The cooperation from both sides (i.e., academician and university) is needed to promote each other to achieve a win-win situation.

LIMITATIONS

Regarding study limitation, this research only concentrated on academic staffs in eight Malaysian public universities and does not include academic staff of private universities. Therefore, the results of this research could not be generalized to those working in private universities as they might have different organizational culture, human resource practices, management systems and policies that might affect their career-related behaviours. Future researchers could widen the scope of examination by incorporating academic staffs from private universities and perform comparative studies.

In summary, the research results have provided support for the key propositions. Most importantly, this research has succeeded in providing empirical evidences pertaining to the link between goal-setting, self-management strategies and psychological success.

ACKNOWLEDGEMENTS

Researchers would like to thank Universiti Utara Malaysia for the financial support in conducting the research by awarding the Leadership Development Scheme (LEADS) Grant.

REFERENCES

- Akrivos, C., A. Ladkin and P. Reklitis, 2007. Hotel managers career strategies for success. *Int. J. Contemp. Hospitality Manage.*, 19: 107-119.
- Arokiasamy, L., I. Maimunah, A. Aminah and O. Jamilah, 2011. Predictors of academics career advancement at Malaysian private universities. *J. Eur. Indus.*, 35: 589-605.
- Aryee, S. and Y.A. Debrah, 1993. A cross-cultural application of a career planning model. *J. Organizational Behav.*, 14: 119-127.
- Barclay, D.W., R. Thompson and C. Higgins, 1995. The partial least squares (PLS) approach to causal modelling: Personal computer adoption and use an illustration. *Technol. Stud.*, 2: 285-309.
- Bozionelos, N., 2003. Intra-organizational network resources: Relation to career success and personality. *Int. J. Organizational Anal.*, 11: 41-66.
- Bozionelos, N., 2008. Intra-organizational network resources: How they relate to career success and organizational commitment. *Personnel Rev.*, 37: 249-263.
- Cairo, J., 2006. How to set and achieve goals and inspire others: Turning goals into realities. Advantage Quest Publications, Petaling Jaya, Selangor.
- Chang, P.B.L., 2002. Career goals and career management strategy among information technology professionals. *Career Develop. Int.*, 7: 6-13.
- Cohen, J., 1988. *Statistical Power Analysis for the Behavioral Sciences*. 2nd Edn., Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Dawo, J.I.A., S.M.W. Enose and O.O. Tony, 2012. Evaluation of academic staff development practices outcomes on job performance in selected public universities in Kenya. *Int. J. Acad. Res. Prog. Educ. Develop.*, 1: 309-317.
- Fornell, C. and D.F. Larcker, 1981. Evaluating structural equation models with unobservable variables and measurement error. *J. Marketing Res.*, 18: 39-50.

- Gould, S. and L.E. Penley, 1984. Career strategies and salary progression: A study of their relationships in a municipal bureaucracy. *Organizational Behav. Human Perform.*, 34: 244-265.
- Gould, S., 1979. Characteristics of career planners in upwardly mobile occupations. *Acad. Manage. J.*, 22: 539-550.
- Greenhaus, J.H., S. Parasuraman and W.M. Wormley, 1990. Effects of race on organizational experiences, job performance evaluations and career outcomes. *Acad. Manage. J.*, 33: 64-86.
- Hair, J.F., W.C. Black, B.J. Babin and R.E. Anderson, 2010. *Multivariate Data Analysis*. 7th Edn., Prentice Hall, USA., ISBN-13: 978-0138132637, Pages: 816.
- Hall, D.T. and D.E. Chandler, 2005. Psychological success: When the career is a calling. *J. Organizational Behav.*, 26: 155-176.
- Heslin, P.A., 2005. Conceptualizing and evaluating career success. *J. Organizational Behav.*, 26: 113-136.
- Kahnweiler, W.M., 2006. Sustaining success in human resources: key career self-management strategies. *Human Res. Plann.*, 29: 24-31.
- Kuo, Y.F., 2006. Influences on employee career strategy adoption in the information service industry: Superior leadership style or employee achievement motivation?. *Int. J. Manage.*, Vol. 23.
- Lau, A. and M. Pang, 2000. Career strategies to strengthen graduate employees employment position in the Hong Kong labour market. *MCB. Univ. Press*, 42: 135-149.
- Locke, E.A. and G.P. Latham, 1990. *A Theory of Goal Setting and Task Performance*. Prentice-Hall, Englewood Cliffs, NJ..
- MASTIC., 2010. National innovation model: Market and technology driven innovation for wealth creation and societal wellbeing. Malaysian Science and Technology Information Centre.
- Nabi, G.R., 1999. An investigation into the differential profile of predictors of objective and subjective career success. *Career Develop. Int.*, 4: 212-225.
- Nabi, G.R., 2001. The relationship between HRM, social support and subjective career success among men and women. *Int. J. Manpower*, 22: 457-474.
- Nabi, G.R., 2003. Situational characteristics and subjective career success: The mediating role of career-enhancing strategies. *Int. J. Manpower*, 24: 653-672.
- Peng, D.X. and F. Lai, 2012. Using partial least squares in operations management research: A practical guideline and summary of past research. *J. Oper. Manage.*, 30: 467-480.
- Podsakoff, P.M. and D.W. Organ, 1986. Self-reports in organizational research: Problems and prospects. *J. Manage.*, 12: 531-544.
- Podsakoff, P.M., S.B. MacKenzie, J.Y. Lee and N.P. Podsakoff, 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Applied Psychol.*, 88: 879-903.
- Preacher, K.J. and A.F. Hayes, 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res. Methods*, 40: 879-891.
- Rouillard, L.A., 1993. *Goals and goal setting*. Menlo Park, CA., Crisp Publications, USA..
- Sekaran, U., 2003. *Research Methods for Business: A Skill Building Approach*. 4th Edn., John Willey and Sons Ltd., New York, USA., ISBN-13: 9780471384489, Pages: 450.
- Wilson, S.B., 1994. *Goal Setting*. 1st Edn., American Management Association, New York, USA..
- World Bank, 2008. Measuring knowledge in the world,s economies: Knowledge assessment methodology and knowledge economy index. World Bank Institute., Washington, DC., USA., http://web.worldbank.org/archive/website01030/WEB/IMAGES/KAM_V4.PDF
- Yean, T.F. and K.K. Yahya, 2011. Personality traits and career strategies as determinants of career satisfaction. *J. Pengurusan*, 33: 53-59.