ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 8, Issue, 04, pp.30056-30064, April, 2016

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

AN EMPIRICAL STUDY OF EMOTIONAL INTELLIGENCE AND ITS RELATIONSHIP TO TRANSFORMATIONAL LEADERSHIP

***,[1]Hussein-Elhakim Al Issa and [2]Rosli Mahmood**

[1]School of Business Management, College of Business, Universiti Utara Malaysia
[2]School of Business Management, College of Business, Universiti Utara Malaysia, Malaysia

ARTICLE INFO

Article History:
Received 23rd January, 2016
Received in revised form
15th February, 2016
Accepted 27th March, 2016
Published online 26th April, 2016

Key words:

Transformational leadership,
Emotional intelligence,
Higher education.

ABSTRACT

This empirical study examines the effects of emotional intelligence on transformational leadership and its importance in higher education institutions. Multivariate analysis in partial least square modelling was used to test the hypotheses and examine the relationship between emotional intelligence and transformational leadership in academic leaders. Data was collected from 333 academic leaders from all faculties of 18 public universities in Peninsular Malaysia. Findings suggest that three out of the four emotional intelligence dimensions are statistically related to transformational leadership. Numerous studies reported a positive relationship between these constructs but methodology concerns could have possibly compromised findings, such as common method variance, and smaller sample sizes, relatively lower variable reliability, single organizational research, and lack of control for related factors. This study adds to the growing literature examining emotional intelligence and transformational leadership but in a non-western setting and by using a larger sample among other steps to avoid methodological issues.

Citation: **Hussein-Elhakim Al Issa and Rosli Mahmood, 2016**. "An empirical study of emotional intelligence and its relationship to transformational leadership", *International Journal of Current Research*, 8, (04), 30056-30064.

INTRODUCTION

Higher education as part of the service sector has long been the single biggest item on the Malaysian government's spending since it declared the national plan for 2020.The services sector is projected to grow 5.4 percent in 2016 and increase its lion's share to 54 percent of GDP from 53.8 percent with all sub-sectors continuing to expand. To this end, higher education will continue to offer scholarships at RM1.65 billion through the Public Service Department; RM288 million through the Ministry of Education; RM250 million through the Ministry of Higher Education; and RM258 million through the Ministry of Health(Abdul Razak, 2016). Universities are challenged to be more accountable and up to the task of internationalization of education (Arambewela and Hall, 2009). At the same time sophisticated measures such as the Global Competitive Index (World Economic Forum) and university rankings (QS and Times) have become more and more transparent and demanding (Huang, 2011; Khosrowjerdi, 2013). A study by Salmi (2009) concluded that a high concentration of talent (academic leaders, faculty and students), abundant resources, and favourable governance, were major factors at play in the world's top universities. Experts continue to advocate for a stronger leadership if they plan to survive and succeed (Altbach, 2004; Altbach, Salmi, 2011) in the face of the paradigm shift requiring universities to maintain a difficult balance between corporate and academic interests (Bess and Dee, 2008; Bolden *et at*., 2012). A major motivation for the study of leadership and its development is the concern that the current content-heavy training to develop leaders for the 21st century have become "out dated and redundant" (Petrie, N., 2011) and unable to keep up with one of the top human capital priorities and number one concern for industry executives (Gurdijan, Halbeisen, and Lane, 2014; Pelster, 2016).This study is also in line with the Malaysian government efforts to boost leadershipsuch as,the identification of leadership as a second pillar in the Critical Agenda Project and establishment of the higher education leadership academy (AKEPT). Improving university leadership is an important step toward tackling the many challenges that face higher education including the decrease in traditional sources of funding and an increase in operational costs (Bakar and Mahmood, 2014). By studying leadership and its predictors, this research contributes to the field of leadership development which is responsible for preparing academic leaders who face incredible challenges that range from sector paradigm shifts to fierce regional and

Corresponding author: Hussein-Elhakim Al Issa
School of Business Management, College of Business, Universiti Utara Malaysia

international competition. All this with the ultimate goal and expectation of producing the highest sought after graduates as well as quality research.

Literature Review and Hypotheses

Transformational Leadership

Leadership is a highly appreciated but complex phenomenon that has many definitions but all seem to agree that it is a process of influencing people toward goal realization (Northouse, 2012). A generally recognized way of transforming universities to greater performance is effective leadership because leaders are at a place of influence and use all resources towards organizational success (Bakar and Mahmood, 2014; Bento, 2011; Gappa, Austin, and Trice, 2007; Yukl and Mahsud, 2010). It is not, therefore, surprising that the leadership area of study has more than 15,000 published books and articles available (Fulmer and Conger, 2004). Transformational leadership was popularized by Burns (1978) who defined leadership as, "a process where leaders and followers engage in a mutual process of 'raising one another to higher levels of morality and motivation". Universities are different from other organizations in that they have distinct objectives and outcomes as destination of learning and change; they have dual identity – part church, part business (Bolden *et al*., 2012). Transformational leadership is particularly appealing in the study of educational leadership because of the importance it lends to motivation and follower development (Bass and Riggio, 2006). More attention has been given to transformational leadership because of its broader view that supplements other leadership models and there is substantial evidence that it is an effective form of leadership (Yukl, G. and Mahsud, R., 2010; Yukl, 1989), plus its strong intuitive appeal, and widely used approach (Northouse, 2012).

Emotional Intelligence

Effective leaders depend on emotional charms to help carry their communications (George, 2000). And since "you can't divorce emotions from the workplace because you can't divorce emotions from people" (Nelton, 1996), it is very natural to include EI in a study about leadership. Emotional intelligence (EI) might have started as part of non-cognitive intelligence with the introduction of social intelligence by Robert Thorndike in the 1930's (Fatt and Howe, 2003; Grewal and Salovey, 2005; Tischler, Biberman, and McKeage, 2002). Then, in the 1980's Howard Gardner introduced multiple intelligences which suggested emotional intelligence followed by Reuven Bar-On in1988 who coined the term "Emotional Quotient" (Bar-On, 1997). Then in 1990, Mayer and Salovey who actually uncovered the term EI in their article "Imagination, Cognition and Personality" (Mayer, Salovey, and Caruso, 2002; Mayer, Salovey, and Caruso, 2004). There has been growing research suggesting that emotional intelligence plays a critical part in work-related processes and that there is a relationship between emotional and social competence (ESC) and performance (Cherniss, 2010). A commonly accepted definition of EI is "the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others" (Mayer and Salovey, 1997). Cherniss (2010) recommends that the abilities EI model by Mayer–Salovey–Caruso represent emotional intelligence since it is pure EI abilities while the other three models contain emotional and social competencies. Similarly, Petrides and Furnham (2003) suggested distinguishing between trait and ability emotional intelligence and that Trait EI is measured through self-report questionnaires, whereas ability EI is assessed using maximal performance. There are many models of emotional intelligence, however, ability EI has been chosen in this study because it's the most widely researched, has been shown by many studies to theoretically and empirically relate to TL and higher performance, and m*et al*l criteria of an intelligence, plusit is the most narrowly defined emotional intelligence.

Emotional Intelligence and Transformational Leadership

Exploring past research for answers to the relationship between leadership and performance has revealed a plethora of studies that have shown that effective leadership is a major contributor to performance, on an individual or organizational level, job or managerial performance (Bass and Avolio, 1994; Bass, Avolio, Jung, and Berson, 2003; Dvir, Eden, Avolio, and Shamir, 2002; Masi and Cooke, 2000; Yammarino, Spangler, and Bass, 1993; Yukl, 1989). Likewise, it is relevant in the higher education sector as it is in industry that many studies show emotional intelligence (EI) is related to higher performance and scholars (Goleman, 1998; Mayer, and Salovey, 1997) have argued that by itself EI probably is not a strong predictor of job performance as much as providing the bedrock for competencies that are, such as leadership. Research has shown that leadership is effected by many factors including emotions, leader's attribute and demographics, cultures, and business models (Barbuto and Burbach, 2006; Barling, Slater, and Kelloway, 2000; Hur, 2008; Judeh, 2010; Radhakrishnan and UdayaSuriyan, 2010; Schafer, 2010; Voon, Lo, Ngui, and Peter, 2009; Wright and Pandey, 2009; Zagorsek, Jaklic, and Stough, 2004).

There are many studies testing ability EI and TL and which have found positive correlation (Jordan, Ashkanasy, and Hartel, 2002; Beshears, 2004; Burbach, 2004; Dabke, 2012; Hartsfield, 2006; Hebert, 2010; Hur, van den Berg, and Wilderom, 2011; Lam, and O'Higgins, 2012; Leban, and Zulauf, 2004; Shapiro, 2008; Thomas, 2011; Wang, and Huang, 2009). At the same time negative or partially supported relationship between EI and TL have also been documented (Clarke, 2010; Weinberger, 2009; Lindebaum and Cartwright, 2010; Cavazotte, Moreno, and Hickmann, 2012; D'Alessio, 2006). Specifically, studies of the four elements of EI abilities as they relate to TL have also shown inconsistent results (Burbach, 2004; Hebert, 2010; Leban, and Zulauf, 2004; Thomas, 2011) with those that are supported slightly outweighing the ones not supported (Clarke, 2010; Weinberger, 2009; Lindebaum and Cartwright, 2010), but this has been suggested to have been caused by methodology issues, such as common method variance (CMV) (Lindebaum and Cartwright, 2010) and small sample size. Also, quite a few meta-analysis studies have produced results showing a positive relationship between emotional intelligence and leadership (Harms, and Crede, 2010; Hunt, and Fitzgerald, 2013; Martin,

2008). However, their main reasons for inconsistent results related to methodology. In particular, questions about common method variance, small sample sizes and same-source data sets, and the lack of a "gold standard" instrument designed to effectively measure EI.

This study examined emotional intelligence based on the four abilities developed by Mayer, Salovey, and DiPaolo (1990) and Mayer and Salovey (1997) which consists of: perception, assimilation, understanding, and regulation of emotions. Firstly, a leader needs to perceive emotions accurately to diagnose whether or not employees actually appreciate and value their work. These perceptions must be maintained by someone skilled in assessing when emotional intervention is needed. By this the leader can inspire and fill followers with higher values and appreciation for work leading to the build of commitment and transform the organization – idealized influence dimension of transformational leadership. Self-emotion appraisal if high in a leader will enable them to build enthusiasm and trust in others and therefore will be able to treat each follower individually and advise them as maintained by the individual consideration component of transformational leadership. Therefore, based on the research structure and the above arguments, the following hypotheses were formulated:

H1: *Self-emotion appraisal has a relationship with transformational leadership among leaders of Malaysian public universities.*

The ability to perceive and use emotions to facilitate thinking can be valuable to a leader who is interested in encouraging creative ideas to problem solving – intellectual stimulation component of TL. This ability to facilitate thinking can come in handy in maintaining positive emotions and riding high mood swings to greater vision and increased motivation – inspirational motivation component of transformational leadership. Therefore, based on the research structure, the following hypothesis was formulated:

H2: *Emotion appraisal of others has a relationship with transformational leadership among leaders in Malaysian public universities.*

Inspirational motivation can be raised with the leader's ability to use and understand emotions, emotional language, and the signals conveyed by emotions. The ability to stay positive is the leader's biggest asset in motivating by expressing inspirational visions that lift when down and keep everyone reaching for their best in good times. This understanding of emotions in different people will showcase in the ability to give personal attention and advice as needed - individual consideration part of TL. Thus, the following hypothesis can be made:

H3: *Use of emotion has a relationship with transformational leadership among leaders in Malaysian public universities.*

The ability to manage emotions so as to attain specific goals is the strongest of all the emotions since it is the most advanced and highest in the order of emotional skill. It requires the ability to manage emotion in oneself and others by moderating negative emotions and enhancing pleasant ones, without repressing or exaggerating information they may convey (Mayer *et al*. 2002) and so connects with all TL dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Then, the following hypothesis will be tested:

H4: *Regulation of emotion has a relationship with transformational leadership among leaders in Malaysian public universities.*

MATERIALS AND METHODS

Research Design

The unit of analysis in this study are individual university leaders: deans, deputy deans, academic department directors and managers. The sampling method used was complex probability systematic sampling. This method involves drawing every nth element in the population starting with a randomly chosen element between 1 and n. In past research, there has been extensive use of cross-sectional methods to study emotional intelligence and leadership styles (Barbuto and Barbuch, 2006; Brown *et al*., 2006; Herbst and Maree, 2008).

Population and Sample

The target population examined was leaders in public universities in peninsular Malaysia. The total current number of leaders i.e. the unit of analysis were individual leaders identified as the deans, deputy deans, and heads of departments, managers and directors of academic departments. Complex probability systematic sampling design was used in the present study. The total number of questionnaires administered in person were 650 with 333 returned and useable.

Measurement

The two variables in this study were measured using the 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Multifactor Leadership Questionnaire (MLQ-5X) (Avolio, Bass, and Jung, 1999) was used to measure transformational leadership, and Wong's Emotional Intelligence Scale (WEIS) (Wong, and Law, 2002) to measure emotional intelligence.

Transformational Leadership Measurement

The MLQ5x, used to measure transformational leadership is a very widely used instrument. According to Bass and Avolio (2000), the MLQ5x measures the transformational leadership four factors: a) idealized influence (charisma), b) inspirational motivation, c) intellectual stimulation, and c) individualized consideration. The MLQ has robust concept validity, confirmed by correlations carried out with personality tests (Ashkanasy and Daus, 2005). MLQ5x Cronbach's alpha reliability ranged from 0.63 to 0.92 (Bass and Avolio, 2000). In the current study Cronbach's alpha was at an acceptable 0.88.

Emotional Intelligence Measurement

Wong's Emotional Intelligence Scale (WEIS) used in this study to measure emotional intelligence was (Wong *et al*., 2002) based on the four ability dimensions described in the domain of ability Emotional intelligence (EI) which consists of four abilities: self-emotion appraisal (SEA), others emotion appraisal (OEA), use of emotion (UOE), and regulation of emotion (ROE) (Mayer and Salovey, 1997). WLEIS offers the shortest administration time (16 items), has a clearer construct structure of emotional intelligence and was effectively used by other leadership studies Amram (2009), and Kautzman (2011). Internal consistency reliability for each of the four factors of the WLEIS in Wong and Law's (2002) original sample ranged from .83-.90. Hur, van den Berg, and Wilderom (2011) found that WEIS's overall Cronbach's alpha of emotional intelligence was .97 which was similar to the reliability reported by Wong and Law (2002). In the current study, the coefficient alphas for the four dimensions across all ratings ranged between 0.82 and 0.89 and overall emotional intelligence Cronbach's alpha was 0.91.

Data Analysis

Data was prepared for analysis by screening and editing it then basic descriptive statistics and frequency distributions of the data ascribed was examined. Outliers were confirmed not to exist and normality was established after transformation applied. There were also no problems with multicollinearity and then next common method variance was tested before the model was ready for measurement evaluation. The present study adopted procedural and statistical remedies to minimize the effects of CMV (Podsakoff, MacKenzie, and Podsakoff, 2003; MacKenzie, and Podsakoff, 2012).

The study relied on protecting anonymity and reducing evaluation apprehension as well as Harman's single factor test which showed that no single factor accounted for the majority of covariance in the predictor and criterion variables (MacKenzie *et al*., 2012) and hence was not a major concern and threat of inflating relationships between variables measured. Next, the quality of the research results was done by evaluating the measurement model through two important tests, validity and reliability.

To begin the measurement evaluation steps, internal consistency reliability through composite reliability and Cronbach's alpha both measured above 0.70 which meant that the model provided reliability as shown in the summary Table 1. Indicator reliability represents how much of the variation in an item is explained by the construct and is referred to as the average variance extracted (AVE). As recommended by Hair, Hult, Ringle, and Sarstedt (2014), the indicator's outer loadings were mostly higher than 0.708 and only ones below 0.7 were considered for removal if the deletion lead to an increase in composite reliability and contribution to content validity. These eliminations resulted in 9 transformational leadership indicators available for further analysis out of 17 and 18 OC indicators available out of the initial 24. As for AVE, they were all above the suggested threshold value of .5 and thus indicator reliability and convergent validity were both established. Discriminant Validity is the extent to which a construct is truly distinct from other constructs by empirical standards (Hair *et al*., 2014). Three methods were used to successfully establishdiscriminant validity: the examination of cross loadings, Fornell-Larcke's criterion, and HTMT. Comparisons of all loadings and cross loadings for every indicator and each of the indicator's outer loadings were higher than the loading of its corresponding construct while all cross loadings with other constructs are considerably lower. Second, Fornell-Larcker's criterion was established by showing that the lowest AVE square root for transformational leadership was at

Table 1. ***Measurement Model Results Summary***

Latent Variable	Indicator	Loadings	Indicator Reliability	Composite Reliability	AVE	Discriminant Validity
Self-emotion appraisal	SEA1	0.743	0.552	0.888	0.665	Yes
	SEA2	0.863	0.745			
	SEA3	0.846	0.715			
	SEA4	0.804	0.646			
Others emotional appraisal	OEA1	0.799	0.639	0.920	0.742	Yes
	OEA2	0.884	0.781			
	OEA3	0.863	0.745			
	OEA4	0.896	0.802			
Use of emotion	UOE1	0.817	0.668	0.897	0.685	Yes
	UOE2	0.785	0.616			
	UOE3	0.861	0.742			
	UOE4	0.845	0.714			
Regulation of emotion	ROE1	0.871	0.758	0.924	0.753	Yes
	ROE2	0.888	0.788			
	ROE3	0.846	0.716			
	ROE4	0.867	0.752			
Transformational Leadership	IC4	0.774	0.599	0.902	0.507	Yes
	IIA2	0.558	0.312			
	IIB2	0.703	0.494			
	IIB4	0.699	0.489			
	IM2	0.714	0.510			
	IM3	0.750	0.562			
	IM4	0.753	0.568			
	IS3	0.691	0.477			
	IS4	0.743	0.551			

0.712 and still higher than the highest correlation between SEA and ROET at 0.593. Finally, the heterotrait-monotrait ratio (HTMT), based on multitrait-multimethod matrix (Henseler, Ringle, and Sarstedt, 2014) which is an estimate of the correlation between constructs and has a very high sensitivity rate. After running bootstrapping function with Smart PLS 3, HTMT report was generated as in Table 2showing discriminant validity established for this model with the highest estimated ratio 0.772 for ROET and SEAT. Discriminant validity problems begin to occur when the estimated HTMT values are above the 0.85 threshold (Clark and Watson 1995; Kline 2011).

Table 2. *HTMT Results*

	SEAT	ROET	UOET	OEAT	TL
SEAT	1				
ROET	0.772	1			
UOET	0.725	0.668	1		
OEAT	0.605	0.564	0.519	1	
TL	0.601	0.542	0.690	0.486	1

Evaluation of the structural model is the final step before hypotheses testing and consists of examining the model's predictive capabilities and constructs' relationships. The steps include assessing the size and significance of path coefficients, the coefficient of determination, and the effect sizes f square and Q square (Hair *et al*., 2014).

The coefficient of determination - R Square (R^2) is a measure of the proportion of an endogenous construct's variance that is explained by its predictor constructs as in Figure 1. While the acceptable level of R square value depends on the research context (Hair, Black, and Babin, 2010), Falk and Miller (1992) suggested 0.10 as a minimum acceptable value, but in human behaviour fields, it is expected that R square values will be low (Hair *et al*., 2014). Typically, researchers consider models good if they explain data with high R^2 values and at the same time have fewer exogenous constructs. As such, in this study, R^2 value was 0.325, which was considered moderately significant since the study's constructs are predominantly behavioural. Path coefficients are the relationships between the latent variables in a structural model. The path coefficients have standardized values between -1 and +1 with coefficients closer to zero considered weakest. Results in Figure 1 showed that the most important construct in the relationship was use of emotion (UOE), with a path coefficient value of 0.388 having the most bearing of all the constructs on transformational leadership. A third step in the evaluation of the structural model is the f^2 effect size which is used to assess the relative impact of a predictor construct on an endogenous construct (Hair *et al*., 2014). The f^2 values of 0.02, 0.15 and 0.35, respectively, are used as guidelines for small, medium and large effect sizes of the predictive variables (Cohen, 1988). The results ranged from very small for SEA at 0.014 to 0.14 for UOE, which is close to medium in effect size of the

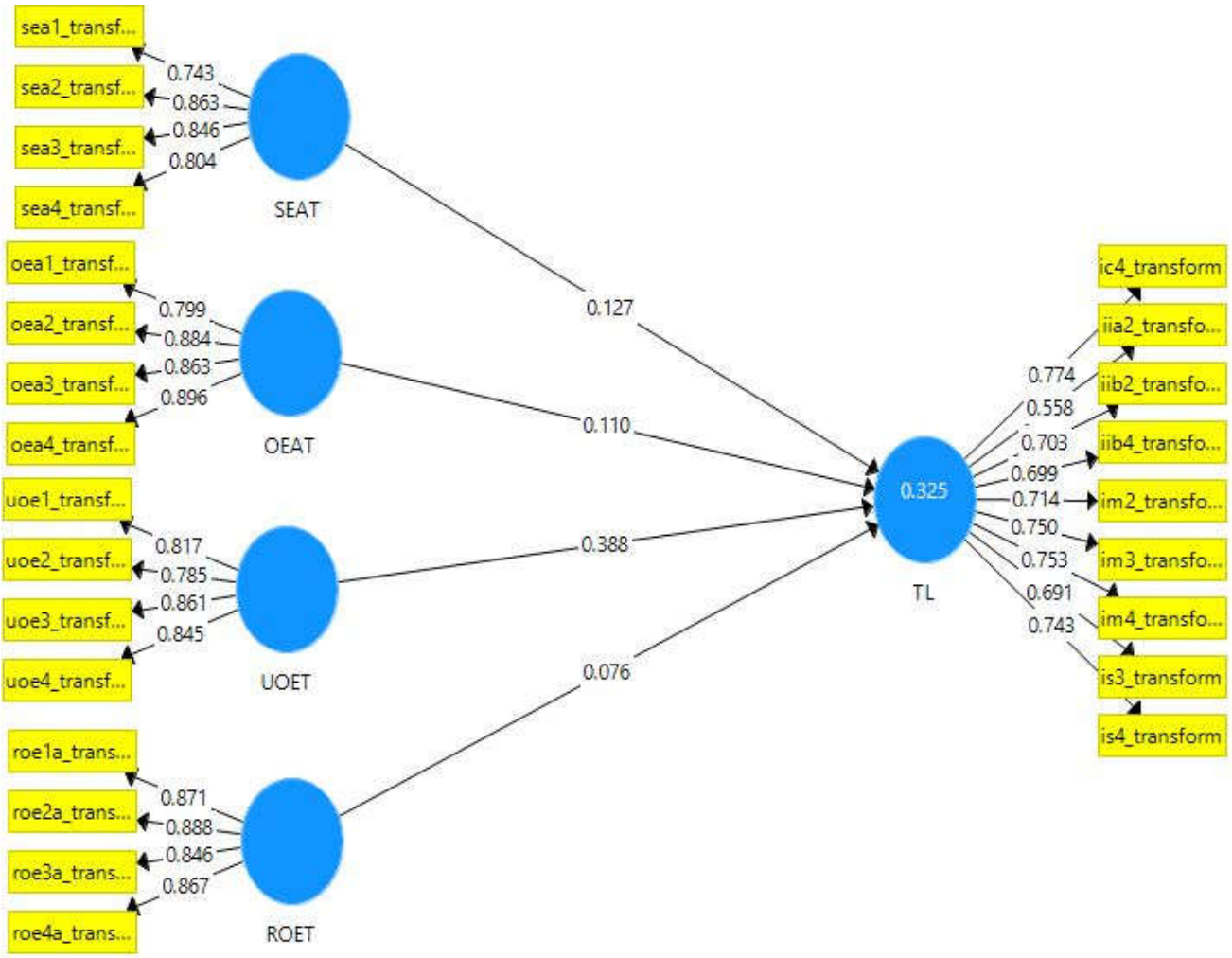

Figure 1. Study Model Path Coefficients

predictive variable. The predictive relevance of the model is its ability to predict accurately the data points of indicators of endogenous constructs (Hair et. al., 2014) and was measured using Q2 effect size. Smart PLS blindfolding procedure obtained Q^2=1-SSE/SSO of 0.158 (omission distance D=7). If Q^2 is positive, the model has predictive validity (Tenenhaus, 1999), and therefore offers support for the model's predictive relevance regarding the endogenous latent variable, transformational leadership.

In order to test the hypothesized relationships bootstrapping computations obtained t values which if larger than the critical value (t distribution values), then the coefficient is considered significant at a certain error probability. The most common used critical values for two tailed tests are 1 .65 (significance level= 10%), 1.96 (significance level = 5%), and 2.57 (significance level = 1 %) (Hair *et al*., 2014). The bootstrapping results accepted H1 H2 and H3 proposing relationships between self-emotion appraisal, others emotion appraisal, and use of emotion with transformational leadership.As support for three hypotheses is shown in Table 3, self-emotion appraisal (SEA) positively and significantly impacted transformational leadership (TL) but only at the significant level of 0.05 (β= 0.110, t= 2.092). Still, the relationship proposed between use of emotion UOE and TL was very highly significant at the 0.01 level (β = 0.388, t = 7.48), and SEA at the significant level of 0.1 (β = 0.127, t = 1.925). However, the hypothesis proposing a relationship between regulation of emotion ROE and TL was rejected even at 0.1 level of significance (β= 0.076, t= 1.145).

Navy HR officers found understanding emotions was significantly related to leadership effectiveness (r (67) = 0.26, p = .016.). Also, Leban and Zulauf (2004) found UOE related with TL when they studied 24 project managers in a variety of industries. Lastly, Hebert (2010) found a positive relationship between EI and TL (r= .37 at p<.05) in a research sample composed of 30 school principals and a significant positive correlation between the combined manage and use branches of EI with TL, Pearson's r (30) = .46, p < .05.

DISCUSSION AND CONCLUSION

This study was conducted to investigate ability emotional intelligence dimensions, treated as distinct constructs, and their relationship with transformational leadership among academic leaders in public universities in peninsular Malaysia. And in conclusion, self-emotion appraisal (SEA), others emotional appraisal (OEA), and use of emotion (UOE) impacted TL but not regulation of emotion (ROE). The framework positively establish with scientific research support for assertions about the importance of emotional intelligence dimensions, and focus attention on important emotional intelligence abilities that have bigger impact on leadership either in selection processes or leadership development efforts. Better understanding of leadership predictors can direct more attention in leadership development programs on the important predictor dimensions that can bring better results with more confidence. This can be achieved by combing the results with the skills approach and thus providing a structure to frame the content used in many leadership education and development programs (Table 3).

Table 3. Results of Hypothesis Testing

Hypothesis	Relationship	Path coefficient	Standard error	t-value	Findings
H1	Self-emotion appraisal → transformational leadership	0.127	0.066	1.925*	Supported
H2	Others emotional appraisal → transformational leadership	0.110	0.053	2.092**	Supported
H3	Use of emotion → transformational leadership	0.388	0.052	7.480***	Supported
H4	Regulation of emotion → transformational leadership	0.076	0.067	1.145	Not supported

Note: ***Significant at 0.01 (1-tailed), **significant at 0.05 (1-tailed), *significant at 0.1 (1-tailed).

The findings of this study are consistent with several previous relevant studies that examined the relationship between ability emotional intelligence dimensions and leadership. Out of the eight most relevant studies examined, five had closely similar results showing relationships between SEA and UOE with TL. Firstly, the study by Hur, van den Berg, and Wilderom, (2011) who collected data from 859 employees, in a South Korean public-sector organization found EI positively related to TL (r=.46, pb.001) with SEA and UOE relating to idealized influence attribute (r=.36) and inspirational motivation (r=.46) dimensions of transformational leadership (TL). Another study with similar results was Burbach's (2004) who surveyed 146 leaders and 649 observers who rated leaders and found a significant positive correlations between EI and TL (r = .33; p < 0.01) and relationships between SEA and UOE with TL. A third study by Thomas (2011) who surveyed sixty-nine U.S.

A future research suggestion would be to include use MSCEIT to control for respondent bias in the measurement of emotional intelligence. That is because MSCEIT assesses how well an individual performs tasks and solves emotional problems, as opposed to a scale that relies on an individual's subjective assessment of their perceived emotional competencies. Since the responses represent actual abilities, the scores are not affected as much by the respondent rationalizing their emotions. Another suggestion is to carry out a similar study but by using multi-rater scales for leadership as recommended by MacKenzie *et al*. (2012) and that is in line with the belief that it is considered one of the strongest ways to reduce common method variance by obtaining independent and dependent measures from separate sources. Current findings enrich the literature covering the topics of emotional intelligence and leadership by providing further support for

transformational leadership theory and thus contribute to its theoretical and empirical understanding. Past research has shown inconsistent results regarding the relationship between emotional intelligence and leadership and so the positive correlation between the EI dimensions and TL found tip the scale toward EI side i.e., self-emotion, others emotion appraisal, and use of emotion dimensions in particular.

REFERENCES

Abdul Razak, M. 2016. *The 2015 Budget Speech*. Retrieved from http://www.sc.com.my/home/2015-budget-speech-by-prime-minister-and-minister-of-finance/

Altbach, P. 2004. *The Costs and Benefits of World-Class Universities*. Retrieved from

Altbach, P. G., and Salmi, J. (Eds.). 2011. *Theroad to academic excellence: The making of world-class research universities*. World Bank Publications.

Amram, Y. 2009. *The contribution of emotional and spiritual intelligences to effective business leadership*. Palo Alto: Institute of Transpersonal Psychology.

Arambewela, R., and Hall, J. 2009. An empirical model of international student satisfaction. *Asia Pacific journal of marketing and logistics*, 21(4), 555-569.

Ashkanasy, N., and Daus, C. 2005. Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. *Journal of Organizational Behavior*, 26(4), 441-452.

Avolio, B., Bass, B., and Jung, D. 1999. Re□examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of occupational and organizational psychology*, 72(4), 441-462.

Bakar, M., and Mahmood, R. 2014. Linking transformational leadership and corporate entrepreneurship to performance in the public higher educations in Malaysia. *Advances in Management and Applied Economics*, 4(3), 109-122.

Barbuto, J., and Burbach, M. 2006. The emotional intelligence of transformational leaders: A field study of elected officials. *The Journal of social psychology*, 146(1), 51-64.

Barling, Julian, Slater, Frank, and Kelloway, K. 2000. Transformational leadership and emotional intelligence: An exploratory study. *Leadership* and *Organization Development Journal*, 21(3), 157-161.

Bar-On, R. 1997. *The Emotional Quotient Inventory (EQ-i): a test of emotional intelligence*. Toronto, Canada: Multi-Health Systems, Inc.

Bass, B. M., and Avolio, B. J. 2000. *Multifactor Leadership Questionnaire: MLQ; Sampler Set; Technical Report, Leader Form, Rater Form, and Scoring Key for MLQ Form 5x-short*. Mind Garden.

Bass, B. M., Avolio, B. J., Jung, D. I., and Berson, Y. 2003. Predicting unit performance by assessing transformational and transactional leadership. *Journal of applied psychology*, 88(2), 207.

Bass, B., and Riggio, R. 2006. Transformational leadership. Mahwah, NJ: Lawrence Erlbaum Associates.

Bento, F. (2011). A discussion about power relations and the concept of distributed leadership in higher education institutions. *The Open Education Journal*, 4, 17-23.

BeShears, R. S. 2004. *The ability of emotional intelligence to predict transformational leadership when personality, affect, and cognitive ability are controlled.* Unpublished dissertation, Wayne State University, Detroit, MI.

Bess, J., and Dee, J. 2008. *Understanding college and university organization: Dynamics of the system* (Vol. 2): Stylus Publishing, LLC.

Bolden, R., Gosling, J., O'Brien, A., Peters, K., Ryan, M., Haslam, A., and Winklemann, K. 2012. *Academic leadership: changing conceptions, identities and experiences in UK higher education*: Leadership Foundation for Higher Education.

Brown, W., Bryant, S., and Reilly, M. (2006). Does emotional intelligence-as measured by the EQI-influence transformational leadership and/or desirable outcomes? *Leadership* and *Organization Development Journal*, 27(5), 330-351.

Burbach, M. E. 2004. *Testing the relationship between emotional intelligence and full-range leadership as moderated by cognitive style and self-concept*. Unpublished dissertation, University of Nebraska, Lincoln.

Burns, James M. 1978. *Leadership*. New York. NY: Harper and Row Publishers.

Caldwell, B. 1994. Missteps, miscues. *Information Week*, 20, 50-60.

Cavazotte, F., Moreno, V., and Hickmann, M. 2012. Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance. *The Leadership Quarterly*, 23(3), 443-455.

Cherniss, C. 2010. Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, 3(2), 110-126.

Clark, L. A., and Watson, D. 1995. Constructing validity: basic issues in objective scale development. *Psychological Assessment*, 7(3), 309–319.

Clarke, N. 2010. Emotional intelligence and its relationship to transformational leadership and key project manager competences. *Project Management Journal*, 41(2), 5-20.

Cohen, J. 1988. *Statistical power analysis for the behavioural sciences*. Mahwah, NJ: Lawrence Erlbaum.

D'Alessio, F. 2006. *The influence of personality, critical thinking, and emotional intelligence in Peruvian managers' leadership.* Unpublished dissertation, University of Phoenix.

Dabke, D. H. 2012. Examining the relationship Between Emotional intelligence with transformational leadership in the work and family domains: an Empirical study. *Journal of Organisation and Human Behaviour*, 1(4), 21.

Dvir, T., Eden, D., Avolio, B., and Shamir, B. 2002. Impact of transformational leadership on follower development and performance: A field experiment. *Academy of management journal*, 45(4), 735-744.

Falk, R. F., and Miller, N. B. 1992. *A primer for soft modelling*. Akron, OH: University of Akron Press.

Fatt, J., and Howe, I. 2003. Emotional intelligence of foreign and local university students in Singapore: Implications for managers. *Journal of Business and Psychology*, 17(3), 345-367.

Fulmer, R., and Conger, J. 2004. *Growing your company's leaders: How great organizations use succession*

management to sustain competitive advantage: AMACOM Div American Mgmt Assn.

Gappa, J., Austin, A., and Trice, A. 2007. *Rethinking faculty work: Higher education's strategic imperative*: Jossey-Bass.

George, J. 2000. Emotions and leadership: The role of emotional intelligence. *Human relations*, 53(8), 1027-1055.

Goleman, D. 1998. *Working with emotional intelligence*. New York: Bantam Books.

Grewal, D., and Salovey, P. 2005. Feeling Smart: The Science of Emotional Intelligence A new idea in psychology has matured and shows promise of explaining how attending to emotions can help us in everyday life. *American scientist*, 93, 330-339.

Gurdijan, P., Halbeisen, T., and Lane, K. 2014. *Why leadership-development programs fail*. Mckinsey Quarterly. Retrieved November 7, 2015, from http://www.mckinsey.com/insights/leading_in_the_21st_century/why_leadership-development_programs_fail

Hair Jr, J. F., Hult, G. T. M., Ringle, C., and Sarstedt, M. 2014. *A primer on partial least squares structural equation modelling (PLS-SEM)*. Sage Publications.

Hair, J. F., Black, B., and Babin, B. J. 2010. Multivariate data analysis (7th ed.). Upper Saddle River: Prentice Hall.

Harms, P., and Credé, M. 2010. Emotional intelligence and transformational and transactional leadership: A meta-analysis. *Journal of Leadership* and *Organizational Studies*, 17(1), 5-17.

Hartsfield, M. 2006. *The internal dynamics of transformational leadership: Effects of spirituality, emotional intelligence, and self-efficacy.* Unpublished dissertation, Regent University, Virginia Beach, VA.

Hebert, E., 2010. *The Relationship between emotional intelligence, transformational leadership, and effectiveness in school principals*. Unpublished dissertation. Georgia State University

Henseler, J., Ringle, C. M., and Sarstedt, M. 2014. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.

Herbst, T., and Maree, K. 2008. Thinking style preference, emotional intelligence and leadership effectiveness: empirical research. SA *Journal of Industrial Psychology*, 34(1), 32-41.

http://aaup.org/AAUP/pubsres/academe/2004/JF/Feat/altb.htm

Huang, M. 2011. A comparison of three major academic rankings for world universities: from a research evaluation perspective. *Journal of Library and Information Studies*, 9(1), 1-25.

Hunt, J., and Fitzgerald, M. 2013. The relationship between emotional intelligence and transformational leadership: An investigation and review of competing claims in the literature. *American International Journal of Social Science*, 2(8), 30-38.

Hur, M. 2008. Exploring differences in leadership styles: A study of manager tasks, follower characteristics, and task environments in Korean human service organizations. *Social Behavior and Personality: an international journal*, 36(3), 359-372.

Hur, Y., van den Berg, P. T., and Wilderom, C. P. 2011. Transformational leadership as a mediator between emotional intelligence and team outcomes. *The Leadership Quarterly*, 22(4), 591-603.

Jordan, P. J., Ashkanasy, N. M., Hartel, C. E. J., and Hooper, G. S. 2002. Workgroup emotional intelligence: Scale development and relationship to team process effectiveness and goal focus. *Human Resource Management Review*, 12, 195–214.

Judeh, M. 2010. Transformational leadership: A study of gender differences in private universities. *International Review of Business Research Papers*, 6(4), 118-125.

Kautzman, R. W. 2011. *An Examination of the Relationship between Emotional Intelligence and Leadership Practices in a Healthcare Organization*. Unpublished doctoral dissertation. Grand Canyon University.

Khosrowjerdi, M. 2013. Asian top universities in six world university rankings. *Webology*, 10(2).

Kline, R. B. 2011. *Principles and practice of structural equation modelling*. Guilford publications.

Lam, C., and O'Higgins, E. 2012. Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organization Development Journal*, 33(2), 149-174.

Leban, W., and Zulauf, C. 2004. Linking emotional intelligence abilities and transformational leadership styles. *Leadership* and *Organization Development Journal*, 25(7), 554-564.

Lindebaum, D., and Cartwright, S. 2010. A critical examination of the relationship between emotional intelligence and transformational leadership. *Journal of Management Studies*, 47(7), 1317-1342.

MacKenzie, S. B., and Podsakoff, P. M. 2012. Common method bias in marketing: causes, mechanisms, and procedural remedies. *Journal of Retailing*, 88(4), 542-555.

Martin, C. M. 2008. *A meta-analytic investigation of the relationship between emotional intelligence and leadership effectiveness* (Unpublished doctoral dissertation). East Carolina University.

Masi, R. J., and Cooke, R. A. 2000. Effects of transformational leadership on subordinate motivation, empowering norms, and organizational productivity. *The International Journal of Organizational Analysis*, 8(1), 16-47.

Mayer, J. D., DiPaolo, M., and Salovey, P. 1990. Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of personality assessment*, 54(3-4), 772-781.

Mayer, J., Salovey, P., and Caruso, D. 2002. *Mayer-Salovey-Caruso Emotional Intelligence Test: MSCEIT. Item booklet.*

Mayer, J.D., and Salovey, P. 1997. What is Emotional Intelligence? In P. Salovey and D. J. Sluyter (Eds.) *Emotional Development and Emotional Intelligence*. New York: Basic Books.

Mayer, John D, Salovey, Peter, and Caruso, David R. 2004. Emotional intelligence: Theory, findings, and implications. *Psychological inquiry*, 197-215.

Nelton, S. 1996. Emotions in the Workplace. *Nation's Business*, 84(2), 25-29.

Northouse, P. G. 2012. Leadership theory and practice (6th ed.). Thousand Oaks, CA:Sage Publications, Inc.

Pelster, B. 2016. *Learning solutions partner*. Retrieved February 10, 2016, from http://www2.deloitte.com/ global/en/profiles/bpelster.html

Petrides, K. V., and Furnham, A. 2003. Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European journal of personality*, 17(1), 39-57.

Petrie, N. 2011. Future trends in leadership development. *Center for Creative Leadership white paper*.

Podsakoff, P., MacKenzie, S., Lee, J., and Podsakoff, N. 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.

Radhakrishnan, A., and UdayaSuriyan, G. 2010. Emotional intelligence and its relationship with leadership practices. *International Journal of Business and Management*, 5(2), p65.

Salmi, J. 2009. *The challenge of establishing world-class universities*. World Bank Publications.

Schafer, J. 2010. Effective leaders and leadership in policing: traits, assessment, development, and expansion. *Policing: An International Journal of Police Strategies* and *Management,* 33(4), 644-663.

Shapiro, D. L. 2008. Revisiting the link between leaders' emotional intelligence and transformational leadership: the moderating role of emotional intensity. In Academy of Management Proceedings (Vol. 2008, No. 1, pp. 1-6). *Academy of Management*.

Tenenhaus, M. 1999. The PLS approach. *Journal of Applied Statistics*, 47(2), 5-40.

Thomas, D. E. 2011. *Examining the relationship between emotional intelligence and leadership effectiveness of navy human resource officers*. (Doctoral dissertation). Northcentral University.

Tischler, L., Biberman, J., and McKeage, R. 2002. Linking emotional intelligence, spirituality and workplace performance: Definitions, models and ideas for research. *Journal of managerial psychology*, 17(3), 203-218.

Voon, M., Lo, M., Ngui, K., and Peter, S. 2009. *Leadership styles in context of institution of higher education in Malaysia*. Retrieved from bai2009.org/file/Papers/1657. doc.

Wang, Y. S., and Huang, T. C. 2009. The relationship of transformational leadership with group cohesiveness and emotional intelligence. *Social Behavior and Personality: an international journal*, 37(3), 379-392.

Weinberger, L. 2009. Emotional intelligence, leadership style, and perceived leadership effectiveness. *Advances in Developing Human Resources*, 11(6), 747-772.

Wong, C., and Law, K. 2002. The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The leadership quarterly*, 13(3), 243-274.

Wright, B., and Pandey, S. 2009. Transformational leadership in the public sector: Does structure matter? *Journal of public administration research and theory*, mup003.

Yammarino, F., Spangler, W., and Bass, B. 1993. Transformational leadership and performance: A longitudinal investigation. *The Leadership Quarterly*, 4(1), 81-102.

Yukl, G. A. 1989. Leadership in organizations. Pearson Education India.

Yukl, G., and Mahsud, R. 2010. Why flexible and adaptive leadership is essential. *Consulting Psychology Journal: Practice and Research,* 62(2), 81.

Zagorsek, H., Stough, S., and Jaklic, M. 2006. Analysis of the reliability of the leadership practices inventory in the item response theory framework. *International Journal of Selection and Assessment*, 14(2), 180-191.

****