Structural Empowerment and Organizational Commitment: The Mediating Role of Psychological Empowerment in Malaysian Research Universities

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Abstract

This current research sought to study a model of empowerment in a Malaysian sample of research universities' academicians by investigating how psychological empowerment could mediate the relationship between structural empowerment and attitudes related to work, particularly organizational commitment. To test this relationship a cross-sectional survey with self-reported questionnaires was conducted. Cluster random sampling was used to generate a randomly selected sample of 400 academic staff in four research universities in Malaysia. A total of 260 valid questionnaires were returned, yielding a response rate of 65%. The confirmatory factor analysis including all hypothesized variables provided an adequate fit. The model fit indices indicated good mode: fit x^2/df*: = 2.316; CFI = .937; TFI = .937; GFI = .918; RMSEA = .051. The result of structural measurement indicated that psychological empowerment partially mediates the relationship between structural empowerment and organizational commitment. Psychological empowerment mediating the relationship between structural empowerment and organizational commitment emerged as an important factor. Structurally empowered universities which practice psychological empowerment skills are provided with another tool by which leaders can work to enhance the level of organizational commitment of their academics.*

Keywords: Psychological Empowerment, Structural Empowerment, Organizational Commitment, Higher Education.

Intorduction

Today, more than 70% of organizations have adopted some kind of empowerment initiatives for at least part of their workforce (Lawler & Benson, 2001). Workplace empowerment has been hailed as the new management intervention for organizational development. Although the idea of empowerment comes from business and industrial efforts to improve productivity, empowering academics can benefit the educational institution, individuals and colleagues as well (Short & Johnson; 1994). Moreover, countries come to the conclusion that educational institutions are the key to gaining entry into the knowledge economy of the 21st century. To achieve this stage, the academic profession is central to the success. They are the ones who carry out the mission and who endeavor to accomplish the goals of the institution (Albatch, 2009; Lee, 2004).

The globalized environment today is characteristically fast paced in change and development. There are significant changes in technology and society and the graduates of the new millennium are expected to operate in a complex and challenging environment. Such a scenario is evident in Malaysia, and the academic community and universities must adapt in order to be in step with current needs and expectations. In short, Malaysia expects that its universities continue to grow.

On the one hand, research universities in Malaysia are responsible for the creation of new knowledge to generate intellectual capital, advance technology, participate effectively in

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knowledge-based economic development, and develop knowledge linking activities to enhance science and technology transfer and commercialization (Morshidi et al., 2007; Sarjit, 2007). On the other hand, challenges confronting continuous professional development in Malaysia are about facing an acute shortage of well-qualified academic staff in universities (Morshidi et al., 2007; World Bank, 2011), often, concerns about accountability and commitment (Ashari et al., 2005; Parsons & Frick; 2009), lie in optimum conditions to balance teaching and research. Expectations of academics are rising. There are concerns that support from the research university, in terms of research funding, pay, promotion opportunities and infrastructural support is not sufficient (Albatch & Salmi, 2011). Increasing emphasis on research, prevalent theme of publish or perish, compromised personal standards, evaluated strictly according to performance in new system (Galston, 2004; Kriger, 2004; Lambert, 2006). Needs, experiences and role expectations do not match (Bolman & Deal, 1997; Short & Rinehart, 1992; Soransaporn, 2001) and they influence academics' work outcomes and behaviors. Much research has indicated that there is conflict between the values of the universities that result in unexpected employee behavior like diminished commitment to the organization and job satisfaction (Bryson, 2004; Deem, 1998; Prichard & Willmott, 1997). Several academic staff have been demotivated, feeling unappreciated and resenting what they see as reduced freedom, a lack of empathy and diminished commitment to the achievement of organizational goals (Bocock & Watson 1994; Smeenk et al., 2009, 2006), and do not welcome what they feel are efforts to diminish their collegiality and academic (Gaziel, 2009; Henkel & Kogan, 1996; Newman et al., 2010).

In the context of higher education, positive workplace outcomes such as high commitment level (Joiner & Bakalis, 2006; Lew, 2010) and realization of high quality performances (Choong, et al., 2012) are essential. Previous studies reveal that structural empowerment is one of the most successful ways to improve work place outcomes such as motivation, organizational commitment, and job satisfaction (Henkin & Marchiori 2003; Honold 1997; Manojlovich & Laschinger 2002; Wang & Lee 2009). Academics with an empowered environment are able to perform powerful tasks; they develop initiative, work in teams as well as individually; they are rewarded for participation, have opportunity for risk taking, and have support for work-life integration which, in turn, increases their workplace behavioral level (Chung, 2011; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Kraimer, Seibert, & Liden, 1999).

However, there is no particular emphasis on the mechanisms and process of the positive relationship between structural empowerment and positive workplace outcomes such as organizational commitment. In other words, empowerment is not just a collection of organizational structures, but individual attitudes about what academics feel in their role and their task and the status they have in the work place. Therefore, providing staff with psychological authority that comes with more involvement in responsibility and self-determination and professional growth, will encourage academics to respond with greater commitment and improved productivity (Wayne et al., 2000). If psychological empowerment does mediate the relationship between structural empowerment and organizational commitment, structurally empowered universities which practice psychological empowerment skills are provided with another tool by which leaders can work to enhance the commitment level of their academics to the university. Accordingly, the present paper contributes to the relevant literature investigating first, the direct relationship between structural empowerment and organizational commitment and the mediating role of psychological empowerment in the relationship between structural empowerment and organizational commitment among academics in Malaysian research universities.

Theoritical Framwork and Hypotheses Development

Organizational development theories emphasize the importance of empowering employees as a crucial factor in motivating them towards greater commitment toward achieving organization goals (Avolio, 1999; Bass, 1999; Yukl, 1998). Based on Kanter (1979), empowering organizations provide their professional staff with access to information, support, resources and opportunity, so that they are able to reach their full potential and empowered to carry out the activities required for successful task accomplishment. Having access to these structures will influence work place behaviors of academics in universities.

Academics in empowered universities are expected to have greater feelings of commitment to their workplace. Although the structural empowerment within a university is important in achieving organizational goals, certain characteristics exhibited by the employees, such as the academic's perception of his/her performance, can also assist in achieving organizational goals (Choong, 2011; McColl-Kennedy & Anderson, 2002). In other words, structural empowerment impact on organizational commitment can gain by considering psychological interventions and through enhancements to their psychological empowerment (Laschinger et al., 2001). Psychological empowerment provides meaning and challenge to academics' work, enhancing the level of self-efficacy, confidence impact and professional growth which may be an effective way to increase commitment of academics to their universities and departments. The positive work behavior outcomes of structural empowerment may be mediated by intrinsically motivating work experience of psychological empowerment (Aryee & Chen 2006; Avolio et al., 2004; Chang et al., 2010; Knol & Linge, 2009; Liden et al., 2000). Psychological empowerment may serve as a mechanism through which structural empowerment influences work place outcomes such as organizational commitment among academics in the research universities.

Previous research in the Malaysian context has only examined how structural empowerment is directly related to workplace outcomes (Ghani, et al., 2009) and not the indirect effect of this relationship. Therefore, little is known regarding if and how structural empowerment is related to organizational commitment and the mechanism of this relationship is not clear in the context in eastern countries. Finally, although recent researchers have emphasized the importance of empowerment on organizational commitment, the underlying psychological mechanisms linking structural empowerment of universities to academics perceptions of organizational commitment have rarely been studied. Accordingly, this study is the first attempt to investigate the mediating role of psychological empowerment between structurally empowered universities and the academics' organizational commitment to advance understanding of empowerment of academics and the possible influence of factors on this perception in eastern countries.

Literature Review

Structural Empowerment and Psychological Empowerment

Perceptions of psychological empowerment may be based on external factors that surround individuals. According to Spreitzer (1995), empowerment is:

> Increased intrinsic task motivation manifested is a set of four cognitions reflecting an individual's orientation to his or her work role: competence, impact, meaning, and self-determination. Competence refers to feelings of self-efficacy or personal mastery that one is capable of successfully performing a task (p. 1443).

Impact refers to the extent to which one's work contributes positively to the achievement of a task and also the degree to which one believes he/she can make a difference to organizational outcomes. Meaning implies how much emphasis one places on the task in hand according to one's own standards while self-determination or choice means the feeling

of freedom to decide on what needs to be done in the workplace (Spreitzer, 1995; Thomas & Velthouse, 1990).

According to Spreitzer (1995), contextual factors such as structural empowerment have an impact on these cognitive elements. Therefore, based on Spreitzer (1996), empowerment is the result of a set of socio-structural characteristics in the organization. Short and Johnson (1994) suggest six dimensions of empowerment in educational settings that include teacher self-efficacy, impact, opportunities for professional growth, engagement in the process of making decision, status, and autonomy. Empowerment, as perceived by Short, Greer and Melvin (1994) is defined as ‘‘a process whereby school participants develop the competence to take charge of their own growth and resolve their own problems” (p.38). It has also been found that structural empowerment is a significant predictor of psychological empowerment in business and educational settings (Bailey, 2009; Laschinger, Finegan, Shamian & Wilk, 2001; Perkins, 2006; Zimmerman 1990). Social structural changes in organizations can influence individuals' empowerment (Dee et al., 2003; Ghani et al., 2009; Robbins et al., 2002; Siegall & Gardner, 2000; Spreitzer 1996; Wallach & Mueller 2006). The review of literature supports the belief that structural empowerment influences the psychological empowerment of employees in different work settings. Siegall and Gardner (2000) found communication with supervisor and general relations with company are significantly related to the dimension of empowerment such as impact, status, and self-determination, but not related to competence. A study by Dee et al. (2003) shows the associations between school organizational structures and teacher empowerment (Dee et al., 2003). Another research by Ghani et al. (2009) in higher education settings in Malaysia suggests five factors of structural empowerment as antecedents of psychological empowerment in universities in Malaysia. Access to information, resources, organizational support, and opportunity to learn, and trust are identified as structural empowerment and antecedents of psychological empowerment (Ghani et al., 2009). Based on this rationale, the following hypothesis is proposed for this study:

Hypothesis 1: There is a positive relationship between structural empowerment and psychological empowerment among academics in Malaysian research universities

Structural Empowerment and Organizational Commitment

To fully appreciate the implications of the complex relationship between employees and the organizations they work for, much research has been done focusing on commitment in the workplace (Meyer & Allen, 1997; Steers, 1977; Wiener, 1982). Organizational commitment is not only a psychological state focusing on the relationship an individual has with an organization and his willingness to stay with that organization, but also on the nature of that psychological state (Meyer & Allen, 1997). According to Meyer and Allen (1991), three-component model of commitment are: affective commitment, which refers to employee's positive emotional attachment to the organization. An employee who has affective commitment is strongly eager to stay with the organization. Continuance commitment refers to the employees’ commitment to the organization in order to not lose the benefits from the organization such as losing economic and social costs. Employee staying with the organization is a matter of need. Normative commitment refers to employees’ commitment to and remains with an organization because of feelings of obligation, such as agreement with the organization.

Structural empowerment plays a significant role in the management of organizational commitment (Decicco et al., 2006; Laschinger et al., 2001). Structural empowerment represents a powerful approach to creating workplaces that attract and retain individuals to organizations. When individuals have a chance to increase their competence and skills while being rewarded and recognized for contributing to organizational goals, they will invest in the

organization. Previous studies found that structural empowerment and organizational commitment were positively correlated to each other in organizations. Indeed, the more they perceive a high level of structural empowerment, the more they want to stay in the organizations (Decicco, Laschinger, & Kerr, 2006; Laschinger, Finegan, & Shamian, 2001; Laschinger, Finegan, Shamian, & Wilk, 2001; Vacharakiat, 2008). Empowered universities support access to academic information and resources. Having information allows academics to make decisions and act quickly, as well as to pass on information to other academics in order to accomplish more. Access to support refers to the academics' ability to innovate. Access to resources such as money, materials and supplies is another empowering work structure (Kanter, 1979). Based on a study by Joiner and Bakalis (2006), fostering academics' commitment to their departments cannot be successful unless the expected linkage between structural empowerment and organizational commitment is explored (Joiner & Bakalis; 2006).

Generally, empowered employees will tend to reciprocate by showing greater commitment to their organization (Chang, Shih & Lin, 2010; Eisenberger et al., 1990; Kraimer et al., 1999; Vacharakiat 2008). Thomas & Velthouse (1990) suggest that empowered employees have higher levels of concentration, initiative, and resiliency, which in turn enhance their level of organizational commitment. Moreover, a university structure that encourages autonomy, facilitates participating decision-making, and expresses confidence in employee competence, remains with the academics who feel more empowered in their work settings. Universities which provide the supportive environment that facilitates their professions, skills, abilities and rewards their contributions, improve academics' organizational commitment. Academics' commitment to their university is largely a function of organizational structure at work. Based on this rationale, the following hypothesis is proposed for this study:

Hypothesis 2: There is a positive relationship between structural empowerment and organizational commitment among academics in research universities.

Psychological Empowerment and Organizational Commitment

Research universities need academics that not only join their university, but stay on to get involved in research and teaching, maintaining high academic standards and play an active role in decision makin as well (Neumann & Finaly-Neumann 1990). Thus, it is critical for the university to promote among their academics a high level of commitment. Organizational commitment of academics to the university provides important consequences for the academic staff and the university (Lambert, 2006). In general, commitment reflects loyalty by employees and a willingness to work toward achieving organizational goals. In other words, to understand the nature of the complex relationship between employees and their organizations, many researchers focused on commitment in the workplace (Allen & Meyer, 1996; Laschinger, Purdy & Almost, 2007).

Studies in business, education and health care settings show that psychological empowerment has a significant relation to organizational commitment (Choet al., 2006; DeCicco et al., 2006; Henkin & Marchiori 2003; King & Ehrhard 1997; Laschinger et al., 2009). Thomas and Velthouse (1990) suggest that empowered employees have higher levels of concentration and initiative, which enhance the level of organizational commitment. Empowered employees see themselves as more capable and will be able to influence their job and organizations in a more meaningful way, act independently, and have a higher commitment to their organization (Liden & Sparrowe 2000; Spreitzer 1995). Furthermore, employees deriving a greater sense of meaning from their work would have higher levels of commitment to their organization and energy to perform (DeCicco et al., 2006; Liu et al., 2006; Manojlovich & Laschinger, 2002; Wiley, 1999).

Generally speaking, based on the review of literature, relationships between contextual factors and work place outcomes are reviewed. While structural empowerment has been frequently examined as the antecedent of psychological empowerment (Bailey, 2009; Carless 2004; Liden et al., 2000; Wallach & Mueller 2006;), the literature shows lack of knowledge on psychological empowerment and workplace outcomes in the context of higher education, especially among Malaysian academics. Based on this rationale, the following hypothesis is proposed for this study:

Hypothesis 3: There is a relationship between psychological empowerment and organizational commitment among academics in research universities.

Mediating role of Psychological Empowerment in Relationship between Structural Empowerment and Organizational Commitment

Laschinger et al., (2001) posited that psychological empowerment is a representation of how employees react to structural empowerment situations. That is, whereas structural empowerment is the perception of the presence or absence of empowering conditions in the workplace, psychological empowerment is employees' reactions to these conditions. Psychological empowerment is an intervening variable between structural empowerment and employee effectiveness (Laschinger et al., 2001).

Spreitzer (1996) found that access to strategic information in the work place and rewards is a contextual factor that is significantly associated with psychological empowerment. This is expected from the result of previous studies that psychological empowerment is a consequence of structural empowerment (Ghani et al., 2009; Laschinger et al., 2001; Perkins, 2006). In addition, psychological empowerment is related to workplace outcomes such as organizational commitment and job satisfaction (Casey, Saunders & O'Hara, 2010; Hechanova, Alampay & Franco, 2006; Laschinger, Purdy & Almost, 2007; Spreitzer, 1997; Wang & Lee, 2009;). Based on Spreitzer (1997), psychological empowerment produces an active self-orientation to employees' work role, so it is reasonable to expect that an active attitude can be changed to positive behavior. These studies suggest that psychological empowerment may be an intervening variable between structural empowerment and employee effectiveness (Bailey, 2009; Chang, Shih & Lin, 2010; Johnson, 2009; Liden, Wayne & Sparrowe, 2000).

Review of literature reveals that both types of empowerment (structural and psychological empowerment) are positively related to workplace behaviors (e.g. Conger & Kanungo, 1988; Seibert et al., 2004; Liden et al., 2000; Sparrowe, 1994; Spreitzer et al., 1997). Although the link between increasing structural empowerment and work place outcomes such as organizational commitment is well-documented and now assumed within business and industry (Biron & Bamberger, 2010; Greasley et al., 2008; Logan & Ganster, 2007; Seibert et al. 2004; Yang & Choi, 2009), the exact mechanisms and processes by which empowered environments influence their employees' positive behavior has been relatively neglected especially in the context of higher education. Moreover, no studies have explored the mediating role of psychological empowerment between structural empowerment and workplace behaviors in Malaysia and only a limited number of studies have been able to empirically justify a mediating role of psychological empowerment between structural empowerment and employee outcomes in the context of higher education which has been mostly done in western countries (Dewettinck & Ameijde, 2011).These findings suggest that psychological empowerment is likely to foster the link between structural empowerment and employee outcomes such as organizational commitment. The conceptual model is formulated in order to empirically test the relationship between structural empowerment and organizational commitment mediated by psychological empowerment in Malaysian universities. Accordingly, a comprehensive model of empowerment in the workplace posits

that psychological empowerment mediates the relationship between the structural empowerment and organizational commitment, which is emerging as the dominant paradigm in the study of organizational commitment. Based on this rationale, the following hypothesis is proposed for this study:

Hypothesis 4: Psychological empowerment mediates relationship between structural empowerment and organizational commitment.

Methodology

Population and Sampling

The target population consists of academics working in four universities selected as research universities (UM, USM, UKM, and UPM) by the Ministry of Higher Education Malaysia in 2006. In determining the sample size for this study, there are issues that should be considered for collecting data to be analyzed using a covariance structure analysis with the maximum likelihood estimation method. As a rule of thumb, any number above 200 is understood to provide sufficient statistical power for data analysis (Hoe, 2008; Kline, 2005). Based on the above criteria and assuming a response rate of 50%, the present study requires a sample size of at least 400.

The ratios of academics in each university were considered in distributing the questionnaires. Cluster sampling procedure was used in the selection of the sample. In each university, selection of respondents was based on cluster purposive sampling. First, five faculties (Faculty of Education, Faculty of Medicine, Faculty of Engineering, Faculty of Science and Faculty of Computer Sciences) were selected from each university as the selected groups. This sampling is purposive as choosing five similar faculties in all four universities provides a more homogeneous sample and more justification to make generalizations from the sample that is being studied. Then, from each faculty, a number of academics were selected as subjects of study by systematic random sampling. Academics were chosen based on academic staff profiles in each department. A total of 260 valid questionnaires were returned, yielding a response rate of 65%.

Measures

This study was carried out within a quantitative framework, allowing the gathering of data by questionnaire with participants of this study. The questionnaire consists of a demographic information survey, structural empowerment scale, psychological empowerment scale, and organizational commitment questionnaire.

Demographic information: participants were asked to indicate their age, gender, work experience, and position they held. Structural empowerment was measured by conditions for work effectiveness questionnaire (CWEQ-II) (Kanter, 1977) consisting of 19 items that measure the six components of structural empowerment including opportunity, information, resources, support, the job activities scale (JAS) for formal power; and the organizational relationships scale (ORS) used to measure informal power and two items for global empowerment scale. Participants were asked to respond these items using a 7-point Likert scale (1=highly disagree' to 7=highly agree'). Scores of total structural empowerment based on the sum of all 36 items range from 21 to 147. The mean scores are used for data analysis in the study. The scale possesses excellent reliability (Burns & Grove 1999; Laschinger et al., 2001; Laschinger, 2005).

Psychological empowerment was assessed by School participant empowerment scale (SPES) (Short & Rinehart, 1992) using a 7-point Likert scale (1=highly disagree' to 7=highly agree'). The 38-item measure can be scored to produce a total psychological empowerment score. Modification in some items is done in order to change the school context to research university context (e.g. item 32 "I have the opportunity to collaborate with other teachers" is

changed to "I have the opportunity to collaborate with other faculty in my department"). Item 18 is added in order to focus more on research tasks: "I have the freedom to make decisions on research topics". Scores for total psychological empowerment, based on the sum of all 38 items, can range from 38 to 266. The mean scores are used for data analysis in the study. Reliability of total psychological empowerment is acceptable (Short & Rinehart, 1992).

Organizational commitment was assessed by the 18-item Organizational Commitment Questionnaire (Allen & Meyer, 1997). Respondents indicate their level of commitment to their departments on a 7-point Likert scale (1=highly disagree' to 7=highly agree'). The Organizational Commitment Questionnaire (OCQ) was selected for this study as it is a widely-used, reliable and validated scale of organizational commitment (Allen & Meyer, 1990). Furthermore, the OCQ consists of three types of commitment namely normative, affective and continuance commitment which makes it ideal for use. We tried to improve the scale items by reducing item ambiguity and deleting equivalent and irrelevant items. Modification in some items is done in order to change the business context to research university context (e.g. item 11 "I would feel guilty if I left my organization now" is changed to "I would feel guilty if I left my department now"). The organizational commitment scale has some of its items written in the negative (items 2, 8, 10, 12). Scores for each subscale range from six to 42, while scores for total organizational commitment are based on 18 items ranging from 18 to 126. The scores on the negatively worded items are reversed before summing up with the positively worded. The mean scores are used for data analysis in the study.

Data Collection Procedure

The questionnaires were sent with a covering letter, followed by a reminder letter two weeks later. Prior to data gathering, negotiation were made with the head of each department in all four universities for the execution of the research. An introductory letter from the head of each department explained the purpose of the study as well as introduced the researcher. The respondents were given two weeks to complete the questionnaires. Each questionnaire took approximately 20-25 minutes to be completed. The academics were given face to face explanations regarding the purpose for their participation. Means, standard deviation and Cronbach alpha and composite reliability values were calculated for each scale (see Table 1).

Internal consistency for each of the scales used in this research was assessed using Cronbach alpha. Cronbach alpha and composite reliability were chosen due to the versatility with the use of continuous latent variables (Huck, 2004). As shown in Table 1, Cronbach's alpha coefficients ranging from .71 to .98 were all above Nunnally's (1978) recommended level of .70, providing evidence of internal consistency reliability for each subscale. According to Hair et al. (2006), CR equal to or more than .7 has adequate composite reliability. Therefore, as a rule of thumb, all three latent variables have adequate reliability.

Table 1: Mean, Standard Deviation, Correlations, and Reliabilities

Instrument (number of items)	Mean	SD	CR	1	2	3
1. Structural Empowerment (21)	28.14	5.82	.88	(.91)		
2. Psychological Empowerment (39)	32.64	4.59	.92	.622**	(.98)	
3. Organizational Commitment (18)	13.82	2.49	.85	.532**	.438**	(.80)

Confirmatory Factor Analysis (CFA)

For the purpose of this study, confirmatory factor analysis with AMOS was done to test and validate the measurement model and measurement invariance tests to cross-validate the measurement model (Hair et al., 2006). Table 2 shows the index of confirmatory factor analysis in three scales reflecting acceptable goodness-of-fit indexes. Goodness of fit indicates how well the specified model reproduces the co-variance matrix among the indicator items. For this study, ratio of x^2 to the degree of freedom, Comparative Fit Index (CFI), the goodness of Fit Index (GFI) and Tucker Lewis Index (TFI) are utilized to determine goodness of fit. These indices range from 0 to 1.00, with values closer to 1.00 (usually above .90) being indicative of good model fit. The Root Mean Square Error of Approximation (RMSEA) is also utilized. A RMSEA coefficient of .08 is normally taken as indicative of satisfactory model fit (Hair et al., 2006). CFA also provides measures of overall degree of fit and model specification, and examines the convergent and discriminant validity and composite reliability of model (Bagozzi & Philips, 1991). Confirmatory factor analyses (CFA) were conducted to examine the construct validity, defined as "the extent to which a set of measured items actually reflects the theoretical latent construct they are designed to measure" (Hair et al., 2006, p.776).

Table 2 Index of Confirmatory Factor Analysis

Index	Structural empowerment	Psychological empowerment	Organizational commitment
x^2/df	2.170	3.092	3.568
GFI	.974	.963	.949
CFI	.984	.900	.941
IFI	.984	.900	.943
RMSEA	.052	.071	.055

The construct of structural empowerment is measured by six factors: opportunity, information, support, rewards, formal power, and informal power. Psychological empowerment is also measured by six factors: decision making, professional growth, status, self-efficacy, autonomy, impact. Organizational commitment construct is measured by three factors: affective commitment, normative commitment, continuance commitment. Before estimating the structural model, a measurement model was examined to assess the relationship between latent variables and indicators. To maintain favorable indicator-to sample-size ratio, item parceling was used. The six dimensions of structural empowerment, six dimensions of psychological empowerment and three dimensions of organizational commitment were treated as latent variables indicators. First-order CFA was conducted to assess measurement of factor loading for items and items that had factor loading lower than .5 were removed.

Convergent validity measured by average variance is extracted. According to Hair et al. (2006), AVE equal to or more than .5 has adequate convergent validity. Therefore, as a rule of thumb, all three latent variables have adequate convergence. Discriminant validity is determined by examining whether the AVE for each construct is greater than the squared correlations (shared variance) between the construct and all other constructs in the model (Farrell 2010; Fornell & Larcker1981; Hair et al., 2006). Table 3 shows the discriminant, convergent validity and correlations between latent variables.

Table 3: Discriminant Validity, Convergent Validity and Correlations

Latent construct	1	2	3
1.Structural Empowerment	**(.55)**	.48	.34
2.Psychological Empowerment	.69	**(.66)**	.30
3.Organizational Commitment	.58	.55	**(.64)**

Note: Correlations are below the diagonal, squared correlations are above the diagonal, and AVE estimates are presented on the diagonal.

Based on rule of thumb, AVE for each construct must be bigger than the shared variance of other constructs. AVE for structural empowerment (.55) is bigger than shared variance of structural empowerment with psychological empowerment (.48), and organizational commitment (.34). AVE for psychological empowerment (.66) is bigger than shared variance of psychological empowerment with structural empowerment (.48), and organizational commitment (.30). AVE for organizational commitment (.64) is bigger than shared variance of organizational commitment with psychological empowerment (.30), and structural empowerment (.34).

Results

Descriptive Analysis

The participants were 280 (70% returned) academic staff in four research universities in Malaysia. The academics were aged between 26 and 65 years (M = 43 years). Of the total, 53% of academics were female and 47% were male. Academics had 12 years work experience in their current departments with average of 29 hours in a week. Almost half of the respondents (43.5%) were senior lecturers (see Table 4).

Table4 Mean standard deviation, frequency and percentage of demographic characteristics

	Frequency	Percentage	Mean	SD
Gender				
Male	122	47		
Female	138	53		
Age (years)			43	8.07
26-36	75	28.7		
37-46	107	41.3		
47-65	78	30.0		
Work experience			12	7.83
Work hour/Week			29	16.06
Position/Rank held				
Professor	15	5.7		

Associate professor	52	20.0
Senior lecturer	113	43.5
lecture	80	30.9
Total	**260**	**100**

Preliminary Analysis

For conducting SEM assumption of normality, outlier, and multicollinearity were checked. Inspection of the dataset revealed a small number of randomly distributed missing items (n=32); these were replaced with imputation of missing values by data maximum likelihood estimation approach by using Full Information Maximum Likelihood (FIML) method (Arbuckle, 1996; Enders & Bandalos, 2001). "The FIML method uses all of the information of the observed data, including mean and variance for the missing portions of a variable, given the observed portion(s) of other variables" (Wothke, 1998). The assumption of multicollinearity was checked by examining correlation coefficients between latent variables, which describe the strength of the relationship between two latent variables (Hair et al., 2006). There was not any multicollinearity between variables.

As all data were from self-report measures, the possibility of common-method bias needed to be ascertained. In this study, controlling for the effects of a single unmeasured latent method factor (CFA) was done to check common method bias (Podsakoff et al., 2003). To assess (Common Methods Variance) bias, all variables were simultaneously factor analyzed by AMOS. Maximum likelihood approach was used. Chi-square is divided by the degree of freedom to assess model fit. A ratio less than 2:1 would indicate concomitant common method bias. For these data, the ratio was 8.221:1 indicating that common-method bias is not problematic in this study.

Structural Equation Modeling (SEM)

The structural equation modeling (SEM) approach is used to look at path coefficients among the variables and verify the direct and indirect effect of structural empowerment on organizational commitment. Goodness-of-fit indices are generated to determine the overall fit of the model to the data (Arbuckle, 2006). The model fit indices indicated good model fitx$^2/df$: = 2.316; CFI = .937; TFI = .937; GFI = .918; RMSEA = .051. All pathways were revealed to be significant. The model was therefore accepted.

Mediation Analysis

The current research investigated the role of psychological empowerment as mediator of the path between structural empowerment and organizational commitment. Testing the hypotheses was done based on the work by Baron and Kenny (1986). According to this work, establishing the role of any mediator involves meeting four conditions: (1) structural empowerment is related to psychological empowerment, (2) psychological empowerment is related to organizational commitment, (3) structural empowerment is related to organizational commitment, and (4) the strength of the relationship between structural empowerment and organizational commitment is reduced when psychological empowerment is added to the model as a mediator. If psychological empowerment mediates the relationship, a significant relationship between the independent variable and the dependent variable should disappear or be reduced when the MV is added to the model (Baron & Kenny, 1986).

Hypotheses Testing

According to Figure 1, Hypothesis 1 predicted that structural empowerment is positively related to organizational commitment among academics in Malaysian research universities. Result providing support for hypothesis 1 ($\beta = .61$, $p < .001$).

See Figure 1: Direct effect of path coefficient

As shown in Figure 2, structural empowerment was significantly related to psychological empowerment ($\beta = .83$, $p < .05$) providing support for hypothesis 2. Hypothesis 2 predicted that structural empowerment is positively related to psychological empowerment. Hypothesis 3 predicted that psychological empowerment would be positively related to organizational commitment. As shown in Figure 2, psychological empowerment is significantly related to organizational commitment ($\beta = .44$, $p < .001$). Following SEM approach, after adding the relationship between psychological empowerment to organizational commitment, the path coefficient between structural empowerment and organizational commitment is reduced from $\beta = .61$($p < .001$) to $\beta = .36$ ($p < .05$) but still significant (see Table 5). Therefore, the effect of structural empowerment on organizational commitment was partially mediated by psychological empowerment. Structural empowerment was the predictor of psychological empowerment and accounted for 64% of the variance. Psychological empowerment and structural empowerment, significantly predicted organizational commitment and accounted for 56% of the variance. The result of direct, indirect and total effect is shown in Table 6.

Table 5 Mediating effect of psychological empowerment

Hypothesis	Independent variable	Mediator	Dependent variable	*β* of IV to DV		MV is a mediator
				Absence of MV	Presence of MV	Yes or no (C/P)
	Structural empowerment	Psychological empowerment	Organizational commitment	.61 ***	.35 **	Yes (P)

Notes: C: completed mediator; P: partial mediator; *** p < .001.

Table 6 Direct, indirect and total effects of structural empowerment on organizational commitment

Path	Direct Effect	Indirect Effect	Total Effect
Structural empo → Org commitment	.61	.83 × .44 = .365	.61 + .365 = .975
Structural empo→ Psychological empo	.83	.000	.83 + .000 = .830
Psychological empo→ Org commitment	.44	.000	.44 + .000 = .440

Note: empo: empowerment; Org: organizational

Nested Model Comparison

In order to choose from among two partially mediated and fully mediated models, nested model comparisons were used. The two models are nested and hence, a chi-square difference

test provides a means of comparison between the two models. Comparison of models fit is shown in Table 7 between fully mediated and partially mediated nested model. The nested model comparisons result shows the difference in fit significant ($\Delta\chi^2 = 35.568$, $p<.000$) indicating that the partially mediated model represents a better model fit than the fully mediated model. Therefore, the effect of structural empowerment on organizational commitment was mediated partially by psychological empowerment.

Table 7 Comparison of the fully and partially mediated models

Model comparisons	Δdf	ΔX^2	*P*	Result
partially mediating model: full mediation Structural empo→Psychological empo→ Org commitment	3	35.568	.000	Worse fit than partial mediating model

Note: empo: empowerment; Org: organizational

Bootstrapping

Bootstrapping is a statistical method that randomly takes a sample size of *n* cases from an original sample to estimate the indirect effect and replaces these cases in the original sample. Bootstrapped confidence intervals provide a more accurate estimate of the indirect effect with small-to-moderate samples size compared with the Sobel tests (Shrout & Bolger, 2002). Bias-corrected bootstrapped 95% confidence interval estimates of the indirect effect were then conducted to confirm the significance of this mediation of psychological empowerment between structural empowerment and organizational commitment (Preacher & Hayes, 2008; Shrout & Bolger, 2002). The indirect effect is significant at $p < .05$ if the 95% confidence intervals do not include the value of zero. The standardized indirect effect of structural empowerment on organizational commitment is between .325 and .373 and the level of confidence is 95%. The indirect effect is therefore significant at .001 ($p = .001$).

Table 8 Indirect effect on the influence of structural empowerment on organizational commitment and job satisfaction through psychological empowerment

	Point estimate	SE	Bootstrapping Percentile 95% lower	upper	*p*
Org commitment	.360	.136	.325	.373	.001

Discussions

The overall aim of this study was to investigate the direct and indirect relationship between structural empowerment and organizational commitment. The results suggest that structural empowerment is a factor that should not be neglected in theorizing on how intrinsic

motivation takes shape (Dewettinck & Ameijde, 2011). Structural empowerment has significant and positive direct effects on psychological empowerment and organizational commitment (Cho et al., 2006; Smith, Andrusyszyn & Laschinger, 2010). Having the opportunity to build strong relationships with peers, access information and resources, increase the academic staff's commitment to the university and their departments. Psychological empowerment consists of six components (decision making, professional growth, status, self-efficacy, impact, autonomy), and it has been suggested that these six components assist academics in influencing their work environment. In other words, motivational processes can be substantially influenced by contextual factors, such as structural empowerment. Furthermore, the findings indicate a positive relationship between structural empowerment and organizational commitment, which is supported by previous studies (Laschinger et al., 2001; Spreitzer, 1995).

Indirect relationship between structural empowerment and organizational commitment suggests that psychological empowerment seems relevant in explaining the process of this positive relationship. This finding is congruent with previous research (Chang, Shih & Lin, 2010; Dewettinck & Ameijde, 2011). The results revealed that psychological empowerment is an effective intervention in the educational context. Psychological empowerment plays an important role in the transformation of attitudes towards organizational commitment. Academic staff who feel that their jobs are meaningful, have the opportunity to participate in decision making at work, have confidence in their job-related competence, and make an impact on others through successful completion of their teaching and research tasks, may be more intrinsically motivated in their responsibilities and more committed in their departments that empower employees (Aryee & Chen 2006; Liden et al., 2000).This study tried to consider whether the findings could be extrapolated to academic employees in other countries, especially southeast countries, to employees in other settings except hospitals and business settings.

Specifically, the findings reveal that the academics' psychological empowerment represents one intervening factor that explains how environment factors come to influence their workplace attitudes and behaviors. However, contrary to what was expected, psychological empowerment does not fully mediate the relationship between these two variables. Although this is consistent with previous research (Dewettinck & Ameijde, 2010; Huang & Wang, 2006; Lee, 2003), the lack of a mediating effect identified by this study has two possible explanations. First, academics in Asian countries tend to have different interpretations of concept of empowerment, which is a concept that originated in western societies (Chang et al., 2010). Work environment in this study differs from the organizational settings studied by previous researchers (Laschinger & Havens, 1997; Laschinger & Wong, 1999). The geographical environment also differs from that of previous researches. The prior research cited above was conducted in Western cultures, where power distance is perhaps not as high as in Malaysian culture (Hofstede, 1991). Sharing information, participating in decision making and autonomy differ from western countries. Second, the work environment for academics in this study differs from previous studies in educational settings (Littrell, 2007).

The findings of this study also indicate that a more complete understanding of academics' commitment to their universities needs to include some focus on the role of empowerment in their workplace. Strategies such as workplace interventions, in-service training and ongoing programs aimed at improving access to empowering structures promote organizational commitment, thus improving the performance and efficiency of research universities.

Implications and Conclusion

There are several implications that can be derived from the findings. First, this study contributes to the body of research regarding integration of the two aspects of structural empowerment and psychological empowerment. The importance of both types of empowerment to academics' organizational commitment has been emphasized by results in this study.

It also provides empirical support for the effect of contextual factors on academics' work-related outcomes through focusing on the indirect effect of psychological empowerment in relation to these variables. Moreover, it suggests a different reflection of the concept of work place empowerment within the educational organizations of East Asian countries, especially in Malaysia. In other words, current research extends previous workplace outcomes literature by using an intervention approach in research universities. By creating a greater sense of empowerment, academics could have a more positive, indirect effect on levels of organizational commitment. This study also advances the knowledge on organizational development in research universities which is a known way to increase productivity and performance of academics. This is especially important in today's environment when higher education is transitioning to world competition and globalization models.

Leadership in higher education should redesign the work environment to increase organizational empowerment, such as through vision sharing, support from administration, or adequate resources so as to enhance organizational commitment of academics. Programs for in-service education should focus on facilitating psychological empowerment to improve and increase organizational commitment. The findings of this study show the identifying evidence that supports the conceptualization of theory of empowerment. Finally, the results imply that an academics' beliefs about the autonomy that they have in their work, the control they have over their workplace outcomes, and the level of decision they made regarding their tasks are cognitions that explain how structural empowerment influences organizational commitment.

Limitations and Further Research

This study is of a cross-sectional design, which does not allow for an assessment of causality. Longitudinal research is needed to assess issues of causality. Further studies with larger samples of Malaysian academics in other universities are required to obtain a comprehensive empowerment model of this population. More research about the role of psychological empowerment is recommended in different organizational and cultural contexts.

It would be desirable for future studies to combine other contextual factors such as organizational culture for empowerment initiatives. More research on the effects of personal factors on psychological empowerment and organizational commitment is recommended in the future. To improve understanding of the relationships between empowerment and organizational commitment for academics in research universities, in addition to the variables tested in this study, other variables such as job stress or leader-member exchange or leadership styles should also be analyzed in future studies to clarify the mediating role of psychological empowerment and work attitudes. The possibility of other mediating variables in the relationships between the suggested constructs should be considered. Future research should continue to examine the impact of personal factors on work place environment.

References

- Altbach, P. G. (2009). Peripheries and centers: research universities in developing countries. *Asia Pacific Education Review, 10,* 15-27.
- Albatch, P. G. & Salmi, J. (2011).The Road to Academic Excellence The Making of World-Class Research Universities. Washington DC. The World Bank
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63,* 1-18.
- Allen, N. J., & Meyer, J. P. (1996). Affective, continuance and normative commitment to the organization: An examination of construct validity. *Journal of Vocational Behavior, 49,* 252-276.
- Arbuckle, J.L. (1996). Full information estimation in the presence of incomplete data. In G.A. Marcoulides and R.E. Schumakcer [Eds.] Advanced Structural Equation Modeling Techniques: Issues and Techniques. Mahwah, NJ: LEA.
- Arbuckle, J. L. (2006). *Amos 7.0 User's Guide*. Chicago, USA: SPSS Inc.
- Aryee, S., & Chen, Z. X. (2006). Leader-member exchange in a Chinese context: Antecedents, the mediating role of psychological empowerment and outcomes. *Journal of Business Research. 59,* 793-801.
- Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*. Thousand Oaks, USA: Sage.
- Avolio, B.J., Zhu, W. Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior, 25*(8), 951–68.
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly, 36,* 421-458.
- Bailey, T. L. (2009). *Organizational culture, macro and micro empowerment dimensions, and job satisfaction: an application of concurrent mixed and multi-level methods in the federal sector*. (Doctoral dissertation) Touro University International, Cypress, U.S.A.
- Bandura, Albert (1986). *Social Foundations of Thought and Action: A social cognitive theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. Journal of Personality and Social Psychology, 51, 1173-1182.
- Biron, M., & Bamberger, P. (2010). The impact of structural empowerment on individual well-being and performance: Taking agent preferences, self-efficacy and operational constraints into account. *Human Relations, 63*(2), 163-191.
- Bass, B. M. (1999). On the taming of charisma: a reply to Janice Beyer. *Leadership Quarterly, 10,* 541–553.
- Bocock, J. and Watson, D. (1994) Managing the University Curriculum: Making Common Cause.
- Buckingham: Society for Research into Higher Education/Open University Press.
- Burns, N., & Grove, S. (1999). *Understanding Nursing Research. (2nd Ed).* Philadelphia: WB Saunders Company.

- Careless, S. A. (2004). Does psychological empowerment mediate the relationship between psychological climate and job satisfaction? *Journal of Business and Psychology, 18*, 405–425.
- Bryson, C. (2004) 'The Consequences for Women in the Academic Profession of the Widespread Use of Fixed Term Contracts', Gender, Work and Organization, 11(2): 187–206.
- Casey, M., Saunders, J., & O'Hara, T. (2010). Impact of critical social empowerment on psychological empowerment and job satisfaction in nursing and midwifery settings. Journal of Nursing Management. 18(1), 24-34.
- Chang, L. C., Shih, C. H., & Lin, S. M. (2010). The mediating role of psychological empowerment on job satisfaction and organizational commitment for school health nurses: A cross-sectional questionnaire survey. *International Journal of Nursing Studies, 47*(4), 427-433.
- Cho, J., Laschinger, H. K. S., & Wong, C. (2006). Workplace empowerment, work engagement and organizational commitment of new graduate nurses. *Canadian Journal of Nursing Leadership, 19*(3), 43-60.
- Choong, Yuen-Onn, Wong, Kee-Luen, Lau, Teck-Chai (2012). Organizational Commitment: An Empirical Investigation on Academics of Malaysian Private Universities, *Business and Economics Research JournaL. 3*(2): 51-64.
- Choong, Yuen-Onn, Wong, Kee-Luen, Lau, Teck-Chai (2011).Psychological empowerment and organizational commitment in the Malaysian private higher education institutions: a review and research agenda. Academic Research International. 1(3): 236-245.
- Chung, C. E. E. (2011), Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty, University of Nevada, Las Vegas:USA.
- http://digitalscholarship.unlv.edu/thesesdissertations/1266
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: integration theory and practice. Academy of Management Review. 13(3), 471-482.
- DeCicco, J., Laschinger, H. K. S., & Kerr, M. (2006). Perceptions of empowerment and respect: Effect on nurses' organizational commitment in nursing home. *Journal of Gerontological Nursing, 32*, 49-56.
- Dee. J. R., Alan, B., Henkin, A. B., & Duemer, L. (2003). Structural antecedents and psychological correlates of teacher empowerment. *Teacher Empowerment. 41*(3), 257-277.
- Deem, R. (1998) '"New Managerialism" and Higher Education: The Management of Performances and Cultures in Universities in the United Kingdom', International Studies in Sociology of Education, 8(1): 47 –70
- Dewettinck, K. & Ameijde, M. (2011) Linking leadership empowerment behavior to employee attitudes and behavioral intentions: Testing the mediating role of psychological empowerment, *Personnel Review*, 40 (3): 284 – 305.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*, 51–59.
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. Structural Equation Modeling, 8, 430-457
- Farrell, A. M. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research, 63*, 324–327.

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 48*, 39–50.
- Gazeil. H. (2009) Teachers' empowerment and commitment at school-based and non-school-based sites. In Zajda & D. Gamage (Eds.), Decentralization, school-based management, and quality. Dordrecht: Springer
- Ghani, A. Z., Raja Hussin, T. A. B., & Jussef, K. (2009). Antecedents of psychological empowerment in the Malaysian private higher education institutions. *Journal of International Education Studies, 2*(3), 161-165.
- Greasley, K., Bryman, A., Dainty, A., Price, A., Naismith, N., & Soetanto, R. (2008). Understanding empowerment from an employee perspective: What does it mean and do they want it? *Team Performance Management, 14* (1), 39 – 55.
- Givens, R. J. (2010). The role of psychological empowerment and value congruence in mediating the impact of transformational leadership on follower commitment in American churches , International Journal of Leadership Studies, 6 (2)……..
- Hair, J., Black, B. Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th edition). Upper Saddle River, USA: Prentice-Hall.
- Hechanova, R., Franco, E. P., & Alampay, R. (2006). Psychological empowerment, job satisfaction and performance among Filipino service workers. Asian Journal of Social Psychology. 9: 72-78.
- Henkel, M. and Kogan, M. (1996) *The Impact of Policy Changes on the Academic Profession*. Cardiff: University of Wales Institute.
- Henkin, A. B. & Marchiori, D. M. (2003). Empowerment and organizational commitment of chiropractic faculty. *Journal of Manipulative and Physiological Therapeutics, 26*(6), 275.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modeling technique. *Journal of applied quantitative methods, 3*(1), 76-83.
- Hofstede, G. (1991a). Culture and Organizations. New York, McGraw-Hill.
- Honold, L. (1997). A review of the literature on employee empowerment. *Empowerment in Organizations, 5*(4), 202-212.
- Huck, S. W. (2004). *Reading Statistics and Research.* Boston, USA: Pearson Education Inc.
- Huang, X., Shi, K., Zhang, Z., & Cheung, Y. (2006). The impact of participative leadership behavior on psychological empowerment and organizational commitment in Chinese state-owned enterprises: the moderating role of organizational tenure. Asia Pacific Journal of Management. 23(3), 345-367.
- Johnson, B.A. (2009). Empowerment of nurses through organizational culture. *Nursing Education Perspectives, 30*(1) 8-13.
- Joiner, T. A. & Bakalis S. (2006). The antecedents of organizational commitment: the case of Australian casual academics, *International Journal of Educational Management. 20*(6). 439-452
- Kanter, R. M. (1977). *Men and women of the corporation*. New York, USA: Basic books.
- Kanter R.M. (1979). Power failure in management circuits. *Harvard Business Review, 57*, 65–75.
- King, A.S. & Ehrhard, B. J. (1997). Empowerment the workplace: A commitment cohesion exercise. *Empowerment in Organizations. 5*(3), 139 -150.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling: Methodology in the social sciences*. New York, USA: Guilford Press.

- Knol, J., & Van Linge, R. (2009). Innovative behavior: the effect of structural and psychological empowerment on nurses. *Journal of Advanced Nursing, 65*(2), 359-370.
- Kraimer, M. L., Seibert, S. E., & Liden, R. C. (1999). Psychological empowerment as multi-dimensional construct: a test of construct validity. *Journal of Educational and Psychology Measurement 59*(1), 127-142.
- Lambert, A. P. (2006). *Faculty perceptions of empowerment, job satisfaction, and commitment to organization in three Midwest universities*. (Doctoral dissertation). University of Missouri-Columbia, U.S.A.
- Laschinger, H. K. S., & Havens, D. (1996). Staff nurse work empowerment and perceived control over nursing practice, work satisfaction and work effectiveness. Journal of Nursing Administration. 26(9): 27-35
- Laschinger, H. K., & Wong, C. (1999). Staff nurse empowerment and collective accountability: effect on perceived productivity and self-rated work effectiveness. *Nursing Economics, 17*(6), 308-316.
- Laschinger, H. K. S., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: expanding Kanter's model. *Journal of Nursing Administration. 31*(5), 260-272.
- Laschinger, H. K. S., Purdy, N., & Almost, J. (2007). The impact of leader-member exchange quality, empowerment, and core self evaluation on nurse managers' job satisfaction. Journal of Nursing Administration. 37: 221-229
- Laschinger, H., Finegan, J., & Wilk, P. (2009). Context matters: The impact of unit leadership and empowerment on nurses' organizational commitment. *Journal of Nursing Administration, 39*, 228-235.
- Laschinger, H. K. S. (2005). *Research in nursing administration and nursing service delivery: Building knowledge for evidence-based nursing administration practice*. In Smith, D. L. & Hibberd, N. J. (Eds.). Nursing leadership in Canada (3rd Ed). Toronto: Elsevier Science Ltd.
- Laschinger, H., Leiter, M., Day, A., & Gilin, D. (2009). Workplace empowerment, incivility, and burnout: Impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management, 17*, 302-311.
- Lawler, E. E., Mohrman, S., & Benson, G. (2001). *Organizing for High Performance: The chief executive officer Report on Employee Involvement, total quality management, Reengineering, and Knowledge Management in Fortune 1000 Companies.* San Francisco: Jossey-Bass.
- Lee, M. N. N. (2003). *The academic profession in Malaysia and Singapore: between bureaucratic and corporate cultures.* In P. G. Altbach (Ed.). The decline of the guru: the academic profession in the third world (pp. 338). New York: Palgrave Macmillan.
- Lee, M. N. N. (2004). *Malaysian universities toward equality, accessibility, and quality*. In P. G. Altbach & T. Umakoshi (Eds.). Asian universities: Historical perspectives and contemporary challenges (pp. 377). Baltimore, MD: Johns Hopkins University Press.
- Lew, T. (2010). Affective Organizational Commitment and Turnover Intention of academics in Malaysia . 2010 International Conference on Business and Economics Research. Kuala Lumpur, Malaysia
- Liden, R., Wayne, S. J., & Sparrow, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology, 85* (3), 407–416.
- Liu, C. H., Chang, L. C., Li, I. C., Liao, J. Y.,& Lin, C. I. (2006). Organizational and psychological empowerment on organizational commitment and job satisfaction among primary health professionals. *Journal of Evidence Based Nursing 2* (1), 5–13.

- Logan, M. S., & Ganster, D. C. (2007). The effects of empowerment on attitudes and performance: The role of social support and empowerment beliefs. *Journal of Management Studies, 44*(8), 1523-1550.
- McColl-Kennedy, J. R., & Anderson, R. D. (2002). Impact of leadership style and emotions on subordinate performance. The Leadership Quarterly, 13, 545-559.
- Manojlovich, M., & Laschinger, H. K. S. (2002). The relationship of empowerment and selected personality characteristics to nursing job satisfaction. *Journal of Nursing Administration. 32*(11), 586-595.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: theory, research, and application*. Thousand Oaks, CA: Sage publication.
- Meyer, J. P. & Allen, N. J. 1991. A three component conceptualization of organizational commitment. Human Resource Management Review, Vol. 1: 61-89
- Morshidi, S., Ahmad Farhan, M.S., Ibrahim, K., Koo, Y.L., Nik Meriam, N.S., Norzaini, A., Yang Farina, A.A., Wong, W. 2008, '*Research and collaboration in an expanding higher education market in Asia–Pacific: the experiences of Malaysian universities'*, Ch. 8 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming
- Neumann, Y., & Finaly-Neumann, E. (1990). The reward-support framework and faculty commitment to their university. *Research in Higher Education. 31*(1), 75-97.
- Nunnally, J. (1978). *Psychometric theory* (2nd ed.). New York,USA: McGraw-Hill.
- Perkins, A. (2006). The relationship between social structure and sense of empowerment for school personnel. (Doctoral dissertation). Michigan state university, East Lansing, U.S.A.
- Podsakoff, P. M., MacKenzie, S. M., Lee, J., & Podsakoff, N. P.(2003). Common method variance in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and re sampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.
- Prichard, C. and Willmott, H. (1997) 'Just How Managed is the Mc University?', Organization Studies, 18(2): 287– 316
- Robbins, T. L., Crino, M. D., & Fredendall, L. D. (2002). An integrative model of the empowerment process. *Human Resource Management Review, 12*(3), 419-443.
- Sarjit, K., Morshidi, S. & Norzaini, A. (2007). *Globalization and Internationalization of Higher Education in Malaysia.* Universiti Sains Malaysia Publisher and Institut Penyelidikan Pendidikan Tinggi Negara, Penanag.
- Seibert, S. E., Silver, S. R. & Randolph, W. A. (2004). Taking empowerment to the next level: A multiple-level model of empowerment, performance and satisfaction. *Academy of Management Journal, 47*(3), 332-349.
- Siegall, M., & Gardner, S. (2000). Contextual factors of psychological empowerment. *Personnel Review, 29*(6), 703-722.
- Short, P. M., & Johnson, P. E. (1994). Exploring the links among teacher empowerment, leader power, and conflict. Education, *114*(4), 581-593.
- Short, P. M., Greer, J. T., & Melvin, W. M. (1994). Creating empowered schools: Lessons in change. Journal of Educational Research, 32(4), 38–52.
- Short, P. M., & Rinehart, J. S. (1992). Empowerment within the school environment school participant empowerment scale: Assessment of level of. Empowerment within the school environment. *Educational and Psychological Measurement, 52*(4), 951-961.

- Shrout, P.E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422–445.
- Soranastaporn, S. (2001). *The relationship between the power of department chairs and faculty conflict, empowerment, and compliance at Mahidol University in* Thailand. (Doctoral dissertation). Illinois State University, U.S.A.
- Sparrowe, R. T. (1994). Empowerment in the hospitality industry: An exploration of antecedents and outcomes. *Journal of Hospitality & Tourism Research, 17*(3), 51-73.
- Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal, 39*, 483-504.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal, 38*(5), 1442-1465.
- Spreitzer, G. M. (1997). Toward a common ground in defining empowerment. In W. A. Pasmore & R. W. Woodman (Eds), Research in organizational change and development. Vol. 10 (pp.31-62). Greenwich, CT: JAI Press, Inc.
- Smeenk, S.G.A., Eisinga, R.N., Teelken, J.C. and Doorewaard, J.A.C.M. (forthcoming) The Managerialism Contradiction. A Literature Review of the Relationships between Predictors and Organisational Commitment, International Journal of Management Reviews.
- Smeenk, S.G.A., Eisinga, R.N., Teelken, J.C. and Doorewaard, J.A.C.M. (2006).The effects of HRM practices and antecedents on organizational commitment among university employees, *Int. J. of Human Resource Management* 17(12): 2035–2054
- Smith, L. M., Andrusyszyn, M. A., & Laschinger, H. K. S. (2010). Effects of workplace incivility and empowerment on newly-graduated nurses' organizational commitment. *Journal of Nursing Management, 18*(8), 1004-1015.
- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. Administrative Science Quarterly, 1977, 22, 46-56.
- Thomas, K., & Velthouse, B. (1990). Cognitive element of empowerment: An interpretive model of intrinsic motivation. *Academy of Management Review, 15*(4), 666-681.
- Vacharakiat, M. (2008). *The relationships between empowerment, job satisfaction, and organizational commitment between Filipino and American registered nurses working in the U.S.A.* (Doctoral dissertation). George Mason University, Fairfax, U.S.A.
- Wallach, V. A. & Mueller, C. W. (2006). Job characteristics and organizational predictors of psychological empowerment among paraprofessionals within human service organizations: An exploratory study. *Journal of Administration in Social Work, 30*(1), 95-116.
- Wang, G. & Lee, P. D. (2009). Psychological empowerment and job satisfaction: an analysis of interactive effects. *Group Organization Management, 34*(3), 271-296.
- Wayne, S.J., Liden, R.C., Kraimer, M.L., & Graf, I.K. (2000). The Role of Human Capital, Motivation, and Supervisor Sponsorship in Predicting Career Success. *Journal of Organizational Behavior, 20*, 577-595.
- Weiner, Y. (1982). "Commitment in Organization: A Normative View". Academy of Management Review, 7, 418-428.
- Wiley, D. M. (1999). *Impact of locus of control and empowerment on organizational commitment.* (Doctoral dissertation).United States International University, U.S.A.
- World Bank (2011). *Putting Higher Education to Work: Skills and Research for Growth in East Asia.* The International Bank for Reconstruction and Development.Washington DC. 2011. Putting Higher Education to
- Work: Skills and Research for Growth in East Asia. Washington, DC: World Bank.

- Wothke, W. (1998). Longitudinal and multi-group modeling with missing data. In T. D. Little, K. U. Schnabel, and J. Baumert [Eds.]. Modeling longitudinal and multiple group data: Practical issues, applied approaches and specific examples.. Mahwah, NJ: Lawrence Erlbaum Publishers.
- Yang, S. & Choi, S.O. (2009). Employee empowerment and team performance: Autonomy, responsibility, information, and creativity. *Team Performance Management, 15* (5/6), 289-301.
- Yukl, G. (1998). *Leadership in organizations* (4th ed). Englewood Cliffs, NJ: Prentice-Hall.
- Zimmerman, M. A. (1990). Taking aim on empowerment research: On the distinction between individual and psychological conceptions. *American Journal of Community Psychology*, *18*(1), 169-177.

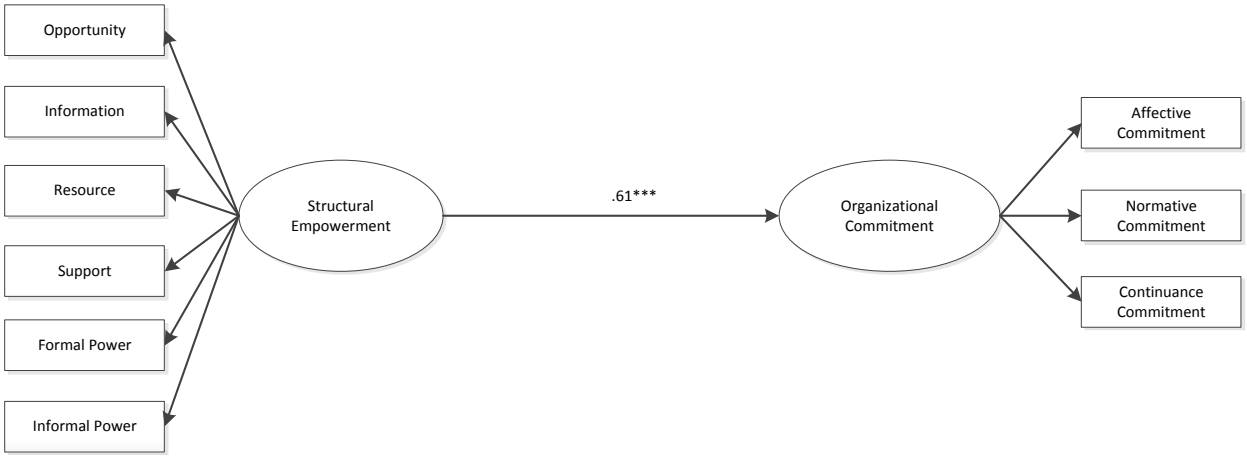

Figure 1 Direct effect of path coefficient

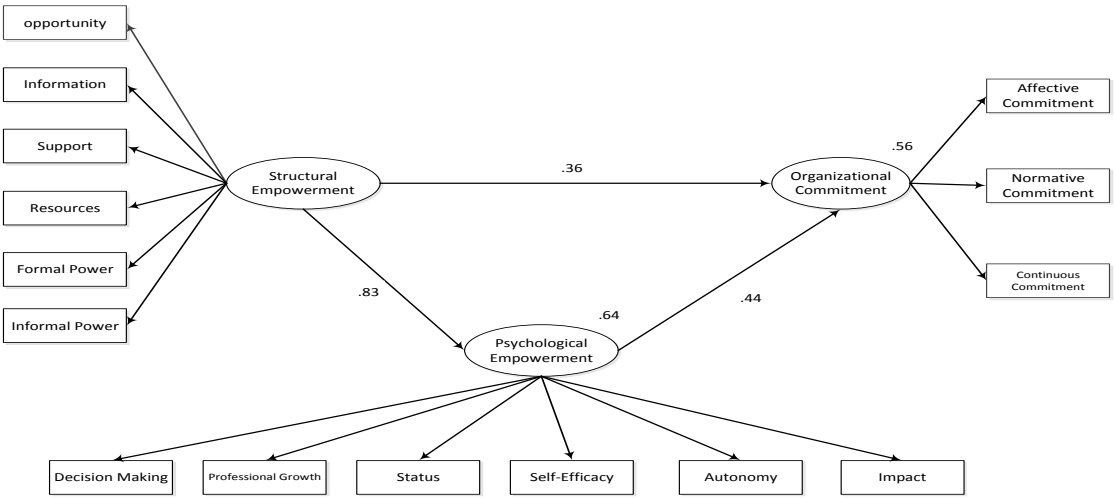

Figure 2 Hypothesized model with path coefficients