



Received on 14 May, 2017; received in revised form, 19 July, 2017; accepted, 17 September, 2017; published 01 February, 2018

INVESTIGATING THE LINK BETWEEN TRANSFORMATIONAL LEADERSHIP, PSYCHOLOGICAL EMPOWERMENT, AFFECTIVE COMMITMENT AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR IN THE PHARMACEUTICAL SECTOR OF INDONESIA

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Keywords:

Transformational leadership, Psychological empowerment, Affective commitment, Organizational citizenship behavior

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ABSTRACT: Modern organizations face increasing competition due to globalization, technological change, politics and economics. In order to cope with these, public organizations, including organizations at the central and local government levels, must improve their efficiency and performance to reflect the presence of organization in other countries. Leaders, therefore, must act more quickly in encouraging and motivating followers to achieve goals in groups and organizations; doing organizational transformation by explaining their vision in the future; and effectively driving employees growth. This study aims to investigate whether transformational leadership is associated with psychological empowerment, affective commitment, and organizational citizenship behavior. By using partial least squares (PLS) based structural equation modeling (SEM) technique to analyze 244 employees working in Indonesian's pharmaceutical sector, the results show that transformational leadership is significantly associated with psychological empowerment, affective commitment, and organizational citizenship behavior as well as psychological empowerment is significantly associated with affective commitment and organizational citizenship behavior; and at the same time, affective commitment is not significantly associated with organizational citizenship behavior. The findings imply that management should take into consideration the transformational leadership style in terms of inspirational motivation, individual consideration, intellectual stimulation and idealized influence to encourage and improve OCB, psychological empowerment, and affective commitment of employees.

INTRODUCTION: Modern organizations face increasing competition due to globalization, technological change, politics and economics. In order to cope with these, many experts argue that public organizations, including organizations at the central and local government levels, must improve their efficiency and performance to reflect the presence of organization in other countries ¹.

Leaders, therefore, must act more quickly in encouraging and motivating followers to achieve goals in groups and organizations; doing organizational transformation by explaining their vision in the future; and effectively encouraging employees growth ².

Some studies have reported that transformational leadership has a positive effect on employee outcomes, especially including satisfaction, commitment and employee achievement ^{3, 4}. Transformational leadership plays an important role in effort to achieve organizational goals and foster the development of employee innovative behaviors and other work behaviors, such as

<p>QUICK RESPONSE CODE</p>	<p style="text-align: center;">DOI: 10.13040/IJPSR.0975-8232.9(2).766-74</p> <hr/> <p style="text-align: center;">Article can be accessed online on: www.ijpsr.com</p>
<p>DOI link: http://dx.doi.org/10.13040/IJPSR.0975-8232.9(2).766-74</p>	

affective commitment and organizational citizenship behavior^{1, 5}. Previous studies have examined the relationship between transformational leadership and organizational citizenship behavior with respect to trust, psychological empowerment, job satisfaction, personal identification, motivation, organizational commitment, job involvement, self-efficacy, and procedural justice^{1, 3, 6-9}.

Previous research that examined the relationship between transformational leadership and organizational effectiveness more focus on organizations in North America than in Asia. Furthermore, several studies have examined these relationships in the context of public sector in Asia^{1, 10}, but it has no highlighted to Indonesian public sector in particular. Therefore, this study focuses on pharmaceutical organizations in Asia particularly in Indonesia by identifying methodological issues concerning the linkage between transformational leadership, psychological empowerment, affective commitment, and organizational citizenship behaviour.

Literature Review and Hypotheses:

Organizational Citizenship Behaviour: Recent years have shown to scientists and managers about employee discretionary behaviors, especially the behaviors that can improve work effectiveness in the period of dramatic change¹¹. This is because of these behaviors are closely related to task performance¹², which can lead to increase organizational effectiveness and efficiency¹³.

Organizational citizenship behavior (OCB) is defined by Organ¹⁴ as extra role behavior that goes beyond the roles and responsibilities described. Barker¹⁵ defines OCB as a discretionary and facilitative behavior that has no related to the formal reward system of organization and can lead to increase organizational effectiveness. Organ¹⁴, Podsakoff *et al.*,¹⁶ divided OCB into five sub-dimensions: civic virtue, conscientiousness, altruism, courtesy, and sportsmanship. Civic virtue refers to actively involvement in dealing with organizational problems and issues, such as offering innovative ideas to promote organizational growth and development⁶. Conscientiousness refers to the behaviors that in accordance with organizational rules and instructions, such as not taking unnecessary rest and reporting to work on time.

Altruism means helping peers in need. Courtesy is linked to the actions that can prevent problems, such as avoiding practices that make others work harder and giving sufficient notice to employees so that they can manage over workload. Sportsmanship refers to the acts of tolerance of various problems that exist within the organization¹⁴.

Transformational Leadership: According to Mac Kenzie *et al.*,¹⁷ transformational leadership is to motivate followers to try and show their performance go beyond simple exchange of rewards. Bass and Avolio² argued that transformational leadership is motivating followers to exceed their expectations by making awareness of the importance of particular goals, making followers incorporate self-interest for the benefit of the organization, and motivating them to achieve, grow, and self-actualize.

Bass and Avolio² classified transformational leadership dimensions into four categories: (1) Idealized influence: Transformational leaders become role model for followers, facilitate acceptance of group goals, and encourage them to upgrade their organizational goals; (2) Intellectual stimulation: Leaders help followers to identify new approaches when they face difficult challenges; (3) Individual consideration: Leaders pay more attention to the needs of followers, act as mentors, and listen to the followers complaints; and (4) Inspirational motivation: Leaders communicate high expectations to followers, inspire them through motivation to commit and become part of a shared vision of the organization.

Transformational leadership behaviors get highly attention in terms of its relationship to OCB followers^{3, 18}. The scientists found a positive influence of transformational leadership on OCB - particularly with regard to helpful behavior and organizational compliance¹⁹, and helpful behavior, organizational compliance and civic virtue¹⁸.

When transformational leaders function as role model and pay special attention to the needs of individual followers and common goals, they encourage followers to engage in self-sacrificing behavior related to OCB¹⁸. Several studies have reported a direct influence between transformational leadership behaviors and OCB^{7, 8}.

Based on strong theoretical and empirical evidence, the proposed hypothesis is:

Hypothesis 1: Transformational leadership positively related to OCB. Epitropaki and Martin²⁰ noted that transformational leaders are able to empower followers to develop their conviction that they are seriously viewed as valuable assets of organization. Several studies have reported a strong positive impact of transformational leadership on psychological empowerment^{10, 21}. Based on strong evidence, the proposed hypothesis is:

Hypothesis 2: Transformational leadership positively related to psychological empowerment. Transformational leaders build an environment in which followers are more likely to be committed to their organization. Many studies have shown a positive influence of transformational leadership on employee organizational commitment^{10, 22}. The results of Kim's study²³ indicated a positive relationship between transformational leadership and affective commitment. Based on strong theoretical and empirical evidence, the proposed hypothesis is:

Hypothesis 3: Transformational leadership positively related to affective commitment.

Psychological Empowerment: Psychological empowerment has been viewed as an important variable in terms of employee attitudes and behaviors²⁴. Psychological empowerment is considered as a process of enhancing the sense of self-efficacy and encouraging task motivation, reflecting the individual attitudes related to work, career and purpose of life²⁵.

According to Spreitzer²⁶, psychological empowerment consisted of four dimensions: competence, meaning, self-determination and impact. These dimensions display the status of active employees. Competence refers to an individual belief in his or her capacity to successfully perform a given task²⁶. Meaning is the value and personal standard that individual is placed in accordance with the demand for a given job²⁵. Self-determination or choice involves a feeling of autonomous individual to initiate and manage action in the workplace. Impact refers to the extent of individual behavior related to work that result a difference outcome to organizational²⁵.

Conger and Kanungo²⁷ stated that psychological empowerment is a kind of internal motivation that is useful in promoting OCB. Psychologically empowered employees render better about the tasks they perform and consider it as a meaningful and challenging. Thus, employees who are psychologically empowered perform better and show higher OCB. Morrison²⁸ explained that empowerment can encourage employees, increase their motivation, ideal, and demonstrate OCB. The findings of Jha⁸, Wat and Shaffer²⁹ also showed that employee psychological empowerment significantly influence OCB. Based on strong theoretical and empirical evidence, the proposed hypothesis is:

Hypothesis 4: Psychological empowerment positively related to OCB. Psychological empowerment is achieved by encouraging employees' belief about the meaning of their work, their ability to accomplish the tasks, and their sense of self-determination to influence outcomes of their work³⁰. Previous research has shown that empowered followers display better commitment to the organization^{21, 31}. Based on strong theoretical and empirical evidence, the proposed hypothesis is:

Hypothesis 5: Psychological empowerment positively related to affective commitment.

Affective Commitment: The concept of organizational commitment has been defined in various ways. Mowday *et al.*,³² defined organizational commitment as the extent to which employees identify or understand deeply about values or norms of their organization. O'Reilly and Chatman³³ defined organizational commitment as the perceived psychological affection of employees to their organizations.

Allen and Meyer³⁴ divided organizational commitment into three dimensions, namely affective, continuous, and normative commitment. Affective commitment refers to the emotional attachment of employees to the organization; Continuous commitment refers to the perceived cost of an employee when leaving the organization or refers to something valuable that the employee has invested, which will be lost when employee leaves the organization; and normative commitment is defined as the perceived task of

employees to remain within the organization. The study of the relationship between affective commitment and OCB in public organizations in Asia, especially in Korea, Kim ^{1, 23} reported that affective commitment is positively associated with OCB dimensions such as altruism, civic virtue, and conscientiousness.

Affective commitment can make employees more likely to help co-workers who have a heavy workload (altruism); abided the rules and instructions of the organization (conscientiousness); refrain from complaining about trivia (sportsmanship); and voluntarily participate in meetings (civic virtue). Based on theoretical and empirical evidence, the proposed hypothesis is:

Hypothesis 6: Affective commitment positively related to OCB.

MATERIALS AND METHODS:

Sample and Data Collection: The population of this study was all civilians who working in the pharmaceutical sectors in four large cities of Southeast Sulawesi - Indonesia, which were Kendari, Kolaka, Bau-bau, and Wakatobi City. The sample was conducted using simple random sampling techniques. Technique of data collection was done by distributing 268 questionnaires. After deletion of incomplete responses, 244 questionnaires were usable and analyzed. Out of 244 respondents, 52% were male and 48% were female. In addition, the respondents generally were dominated by the age of 31 - 40 years (40%) and 41 - 50 (30%). With respect to the educational level of respondents, the majority (87%) were graduated from university and 13% went to senior high school (refers to **Table 1**).

Measurement: The total questionnaires consisted of 16 items. All items were measured using a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Organizational citizenship behavior (OCB) was measured using 5 items including altruism, conscientiousness, civic virtue, courtesy and sportsmanship ³⁵. Affective commitment was measured using 3 items adopted from Organizational Commitment Scale ³⁶. Psychological empowerment was measured using 4 including competence, meaning, self determination and impact which adopted from Empowerment at Work Scale ²⁶. Transformational leadership was measured using 4 items including idealized influence

(charisma), intellectual stimulation, individualized consideration, and inspirational motivation which adopted from Multifactor Leadership Questionnaire (MLQ-5X) ².

TABLE 1: DESIGNATION OF THE RESPONDENTS

Items	Description	Frequency	Percentage
Gender	Male	127	52
	Female	117	48
Age	< 21 years old	8	3
	21–30 years old	31	13
	31–40 years old	98	40
	41–50 years old	72	30
	> 51 years old	35	14
Education level	Graduated from university	212	87
	Senior high school	32	13

Structural Equation Modelling and Partial Least Square:

Structural equation modelling (SEM) is a multivariate analysis technique to test theoretical model that hypothesized by the researcher by using a combination of statistical data and qualitative causal assumption ³⁷. This approach is more confirmatory than exploration, and more suitable for theory testing than theory development. The results of SEM include two components, namely the measurement model and the structural model. The measurement model provides the relationship between latent variables and observed variables, which aims to provide reliability and validity based on these variables. The structural model provides the path strength and the direction of the relationship between latent variables. The combination of both is essential to ensure the quality of a research ³⁸.

SEM can be categorized into two approaches include: (1) covariance-based approach, which is related to some tools such as EQS and Analysis of Moment Structures (AMOS); and (2) variance-based approach, which is related to Partial Least Square (PLS). Thus, in this research, PLS approach was chosen to analyze the data because of the following reasons: research on requirements relationships is relatively new, and there is no measurement model that is already available. PLS can be a reasonable technique to be used when the phenomenon to be investigated is relatively new ³⁹.

RESULT AND DISCUSSION: The measurement model showed that all of the standardized factor loadings of each construct were high (above 0.50)

that ensured the convergent validity⁴⁰. Composite reliability and cronbach α for all the four constructs was above 0.70 that ensured the internal consistency⁴⁰. The average variance extracted (AVE) from all constructs exceeds the cut-off criterion of 0.50 and were greater than the squared

correlations between any pair of constructs (refers to **Table 2**). Since all the figures and measurement of reliability and validity of the measurement items, therefore, this research tested the same measurement model for further testing of the structural models and hypotheses.

TABLE 2: RESULTS OF MEASUREMENT MODEL

Construct indicators	Factor loadings	Cronbach α	Composite reliability	AVE
Organizational citizenship behavior		0.873	0.909	0.674
1. OCB1	0.926			
2. OCB2	0.593			
3. OCB3	0.670			
4. OCB4	0.927			
5. OCB5	0.924			
Affective commitment		0.887	0.932	0.821
1. AC1	0.782			
2. AC2	0.961			
3. AC3	0.964			
Psychological empowerment		0.848	0.896	0.685
1. PE1	0.828			
2. PE2	0.721			
3. PE3	0.877			
4. PE4	0.874			
Transformational leadership		0.639	0.774	0.571
1. TL1	0.800			
2. TL2	0.526			
3. TL3	0.552			
4. TL4	0.813			

Test of Hypotheses: Fig. 1 and Table 3 contained the results of the Smart PLS M3 Version 2.0 software process that was carried for Ringle et al.,⁴¹

which was performed to test the proposed hypotheses H1 until H6.

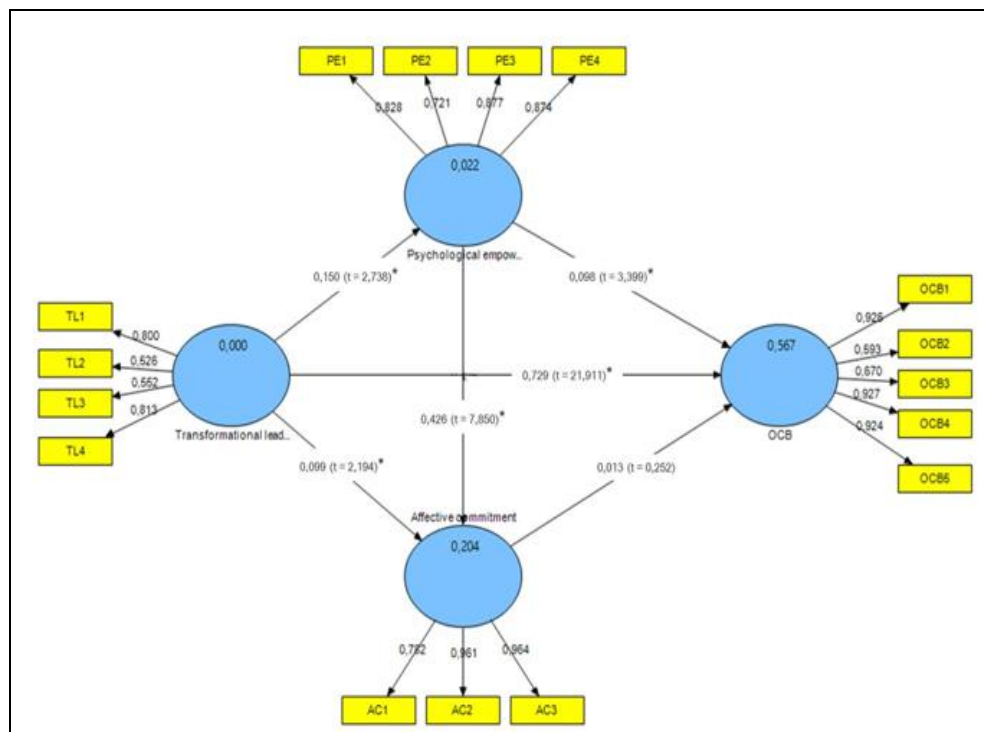


FIG. 1: HYPOTHESES TESTING

TABLE 3: SUMMARY OF HYPOTHESES TESTING RESULTS

		S. E.	T-value	Results
Transformational leadership → OCB	0,729*	0,033	21,911*	Supported
Transformational leadership → Psychological empowerment	0,150*	0,055	2,738*	Supported
Transformational leadership → Affective commitment	0,099*	0,045	2,194*	Supported
Psychological empowerment → OCB	0,098*	0,029	3,399*	Supported
Psychological empowerment → Affective commitment	0,426*	0,054	7,850*	Supported
Affective commitment → OCB	0,013	0,053	0,252	Not supported

The empirical results showed that (1) transformational leadership positively related to OCB (0.729, t - value = 21.911), psychological empowerment ((0.150, t - value = 2.738), and affective commitment (0.099, t - value = 2.194); (2) Psychological empowerment positively related to OCB (0.098, t - value = 3.399), and affective commitment (0.426, t - value = 7.850); and (3) affective commitment did not relate to OCB (0.013, t - value = 0.252). The empirical findings supported hypotheses H1, H2, H3, H4, and H5, whereas the result did not support hypothesis H6.

There is a very little research attempted to test the direct or indirect relationship between transformational leadership and OCB^{9, 23}. For example, Podsakoff *et al.*,³⁵ used job satisfaction as a mediating variable and reported that transformational leadership has a positive indirect influence on OCB. Leithwood and Jantzi¹⁹ suggested that transformational leadership has a positive influence on the two dimensions of OCB (helping and compliance). In addition, Organ *et al.*,⁹ asserted that leadership style has a significant positive influence on two types of OCB (altruism and conscientiousness), with job satisfaction as a mediating variable. They also argued that transformational leadership has a positive indirect influence on sportsmanship, civic virtue, and conscientiousness through job satisfaction and trust, and transformational leadership has a positive direct influence on altruism.

Through mentoring and coaching, transformational leaders shape employees behavior and nurture them to become better individuals. Transformational leaders have a long-term vision for the organization and prepare their subordinates to achieve it. They assist employees in visualizing their own goals and organizational goals. Transformational leaders also provide direction by inspiring employees to make extra efforts and place organizational goals above individual goals⁸.

Transformational leaders often emphasize collaboration, attainment of tasks collectively, learn through shared experience, control and freedom of decision making, and delegate authority to implement ideas that encourage employee participation in the formation and implementation of the ideas. Thus, transformational leadership builds a work environment where employees feel motivated, competent and independent to experience psychological empowerment⁴². In other words, the more transformational leaders act as exemplary models, paying particular attention to employee achievement and growth through coaching and mentoring; articulate vision; and encourage employees to show innovation and creativity in new ways, the more likely employees have identification with organizational values, goals, and norms.

When employees equate their success with their organizations and identify organizational values, goals and norms, they tend to work together to make a positive contribution to the organization³, which in turn makes employees more likely to support their colleagues (altruism), presenting positive ideas for organizational development (civic virtue), in accordance with organizational rules and procedures (conscientiousness), avoiding practices that make other employees jobs more difficult (courtesy), and being tolerant to organizational problems (sportsmanship)¹¹.

The concept of empowerment means that employees learn the importance of taking initiative and decision making, and respond to the challenges of their work innovatively²⁶. Psychological empowerment is not only about sharing responsibility and delegating power by superiors, but also involving subordinates who accept the tasks and responsibilities that have been delegated to them. Employees who are psychologically empowered feel comfortable with the task they are doing and regard it as challenging and meaningful.

Thus, employees who are psychologically empowered are able to perform better and show higher OCB. Previous researches had shown that empowered employees demonstrate better commitment to the organization^{31, 43}. Psychological empowerment leads to motivating employees to take initiative and show endurance at work; giving higher meaning of employees to work; and inculcating higher organizational commitment within employees⁴⁴.

Employee commitment is consistently found to be related to critical behavior in the workplace. Affective commitment facilitates employees in creating trust and strong acceptance of the goals and values of an organization⁴⁵. According to collectivist perspective, employees who have strong collectivistic cultures can show greater loyalty and attachment to their group, so that collective individuals will form affective enchantment to the larger organizations⁴⁶.

In addition, the present study found that affective commitment is not related to OCB. This result is different from the previous findings of Jain⁴⁷, Kim²³, Lavelle *et al.*,¹¹ and Mac Kenzie *et al.*,¹⁷ who found that affective commitment is related to OCB. This may be due to the characteristics of Indonesian organizational culture reflecting the collectivist society⁴⁸ and emphasizing the harmonization of employees, working together, helping each other, and religious values to do better for humanity.

CONCLUSION: Overall, this study extends theory and empirical research that transformational leadership is positively related to employee work attitudes, such as OCB, psychological empowerment, and organizational affective commitment. The results of this study provide theoretical basis for leadership management. According to the findings, organizations especially top management should improve leadership skills in terms of inspirational motivation, individual considerations, intellectual stimulation and idealized influence. There is an interesting point in this study that transformational leadership has a significant influence on employee work attitudes.

The results of this study provide implications for management that organizations can train leadership in terms of inspirational motivation, individual

considerations, intellectual stimulation and idealized influence to encourage and improve OCB, psychological empowerment, and affective commitment of employees.

Like most other studies, this study has limitation that must be considered, that is related to the generalization of research. Using simple random sampling technique tends to decrease one's belief that the sample is representative of the population. Similarly, the clan or tribe of each region in Indonesia needs to be considered to obtain a convincing result of the research. Although this study demonstrates the relevance of transformational leadership, psychological empowerment, and affective commitment to OCB, this study does not take into account a number of other variables that may influence reported results. Therefore, future studies should incorporate experimental and longitudinal design to establish further conclusions on the direction of causality.

ACKNOWLEDGEMENTS: This study was partially supported and sponsored by C. V. Ning Sri Stone Crusher.

CONFLICTS OF INTEREST: None.

REFERENCES:

1. Kim H: A study on the relationship between leadership and organizational effectiveness. *Journal of Social Science* 2009; 35(3): 69–103.
2. Bass BM and Avolio BJ: *Improving organizational effectiveness through transformational leadership*, Thousand Oaks, CA: Sage 1994.
3. Piccolo RF and Colquitt JA: Transformational leadership and job behaviors: the mediating role of core job characteristics. *Academy of Management Journal* 2006; 49(2): 327–340.
4. Seibert SE, Wang G and Courtright H: Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review. *Journal of Applied Psychology* 2011; 96(5): 981–1003.
5. Schyns B and Veldhoven M: Group leadership climate and individual organizational commitment: A multilevel analysis. *Journal of Personnel Psychology* 2010; 9(2): 57–68.
6. Babcock M and Strickland O: The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *Journal of Psychology* 2010; 144: 313–326.
7. Han SH *et al.*: Transformational leadership and knowledge sharing: Mediating roles of employee's empowerment, commitment, and citizenship behaviors. *Journal of Workplace Learning* 2016; 28(3): 130–149.
8. Jha S: Transformational leadership and psychological empowerment: Determinants of organizational citizenship behavior. *South Asian Journal of Global Business Research* 2014; 3(1): 18–35.

9. Organ DW, Podsakoff PM and MacKenzie SB: Organizational citizenship behavior: its nature, antecedents, and consequences Thousand Oaks, CA: Sage 2006.
10. Avolio BJ *et al.*: Transformational leadership and organizational commitment: mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior* 2004; 25: 951–968.
11. Lavelle JJ *et al.*: Commitment, procedural fairness, and organizational citizenship behavior: a multifoci analysis. *Journal of Organizational Behavior* 2009; 30(3): 337–357.
12. Podsakoff NP *et al.*: Individual and organizational level consequences of organizational citizenship behaviors: a meta-analysis. *Journal of Applied Psychology* 2009; 94: 122–141.
13. MacKenzie SB, Podsakoff PM and Ahearne M: Effects of OCB on sales team effectiveness, Unpublished Data Analysis. Indiana University School of Business 1996.
14. Organ DW: Organizational citizenship behavior: the good soldier syndrome, Toronto, ON: Lexington 1988.
15. Barker AR: On Organizational Citizenship, New York: University Press of America, Inc. 2006.
16. Podsakoff PM *et al.*: Organizational citizenship behaviors: a critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management* 2000; 26(3): 513–563.
17. MacKenzie SB, Podsakoff PM and Rich GA: Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science* 2001; 29: 115–134.
18. Kim H: Transformational leadership, organizational clan culture, organizational affective commitment, and organizational citizenship behavior: a case of South Korea's public sector. *Public Organization Review* 2014; 14(3): 397–417.
19. Leithwood K and Jantzi D: The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration* 2000; 38(2): 112–129.
20. Epitropaki O and Martin R: The moderating role of individual differences in the relation between transformational / transactional leadership perceptions and organizational identification. *The Leadership Quarterly* 2005; 16: 569–589.
21. Lan XM and Chong WY: The Mediating Role of Psychological Empowerment between Transformational Leadership and Employee Work Attitudes. *Procedia - Social and Behavioral Sciences* 2015; 172: 184–191.
22. Ismaila A *et al.*: An empirical study of the relationship between transformational leadership, empowerment and organizational commitment. *Business and Economics Research Journal* 2011; 2(1): 89–107.
23. Kim H: Transformational leadership and organisational citizenship behaviour in the public sector in South Korea: the mediating role of affective commitment. *Local Government Studies* 2012; 38(6): 867–892.
24. Dust SB, Resick CJ and Mawritz MB: Transformational leadership, psychological empowerment, and the moderating role of mechanistic - organic contexts. *Journal of Organizational Behavior* 2014; 35(3): 413–433.
25. Thomas KW and Velthouse BA: Cognitive elements of empowerment: an 'interpretive' model of intrinsic task motivation. *Academy of Management Review* 1990; 15(4): 666–681.
26. Spreitzer GM: Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal* 1995; 38(5): 1442–1465.
27. Conger JA and Kanungo RN: The empowerment process: integrating theory and practice. *The Academy of Management Review* 1988; 13(3): 471–482.
28. Morrison EW: Organizational citizenship behavior as a critical link between HRM practices and service quality. *Human Resource Management* 1996; 35(4): 493–512.
29. Wat D and Shaffer MA: Equity and relationship quality influences on organizational citizenship behaviours: the mediating role of trust in the supervisor and empowerment. *Personnel Review* 2005; 34(4): 406–422.
30. Boonyarit I, Chomphupart S and Arin N: Leadership, empowerment, and attitude outcomes. *The Journal of Behavioral Science* 2010; 5(1): 1–14.
31. Givens RJ: 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* 2011; 6(2): 188–214.
32. Mowday RT, Steers RM and Porter LW: The measurement of organizational commitment. *Journal of Vocational Behavior* 1979; 14: 224–247.
33. O'Reilly C and Chatman J: Organizational commitment and psychological attachment: the effects of compliance, identification, and internalization on pro-social behaviour. *Journal of Applied Psychology* 1986; 71: 492–499.
34. Allen NJ and Meyer JP: The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology* 1990; 63: 1–18.
35. Podsakoff PM *et al.*: Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours. *The Leadership Quarterly* 1990; 1(2): 107–142.
36. Meyer JP, Allen NJ and Smith CA: Commitment to organizations and occupations: extension and test of a three component conceptualization. *Journal of Applied Psychology* 1993; 78(4): 538–551.
37. Kline RB: Principles and Practice of Structural Equation Modeling, New York: The Guilford Press 1998.
38. Trochim WKM and Donnelly JP: The Research Methods knowledge Base, Third edition USA: Atomic Dog a part of CENGAGE Learning 2008.
39. Chin WW: Issues and Opinion on Structural Equation Modeling. *MIS Quarterly* 1998; 22(1): 7–16.
40. Hair JF *et al.*: Multivariate Data Analysis, Upper Saddle River, NJ: Prentice-Hall 2010.
41. Ringle CM, Wende S and Will A: Smart PLS 2.0 M3. (Online) Available at <http://www.smartpls.de>. 2005.
42. Ozaralli N: Effects of transformational leadership on empowerment and team effectiveness. *Leadership and Organization Development Journal* 2003; 24(5-6): 335–344.
43. Hamid SF *et al.*: A study on primary school teachers' organizational commitment and psychological empowerment in the district of Klang. *Procedia - Social and Behavioral Sciences* 2013; 90: 782–787.
44. Srivastava AP and Dhar RL: Impact of leader member exchange, human resource management practices and psychological empowerment on extra role performances. *International Journal of Productivity and Performance Management* 2016; 65(3): 351–377.
45. Meyer JP *et al.*: Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior* 2002; 61(1): 20–52.

46. Cohen A: Multiple commitments in the workplace: An integrative approach, Mahwah, NJ: Lawrence Erlbaum 2003.
47. Jain AK: Volunteerism, affective commitment and citizenship behavior: an empirical study in India. *Journal of Managerial Psychology* 2016; 31(3): 1–26.
48. Hofstede G, Hofstede GJ and Minkov M: *Cultures and Organizations: Software of the Mind*, 3rd edition, New York: McGraw-Hill 2011.

How to cite this article:

Handayani S, Udin, Yuniawan A, Wikaningrum T and Supriyati S: Investigating the link between transformational leadership, psychological empowerment, affective commitment and organizational citizenship behavior in the pharmaceutical sector of Indonesia. *Int J Pharm Sci Res* 2018; 9(2): 766-74. doi: 10.13040/IJPSR.0975-8232.9(2).766-74.

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