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Transformational Leadership, Organizational Commitment, and Employee Performance among Nursing Staff in Saudi Arabia

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ABSTRACT

This research is undertaken with a purpose to investigate the impact of transformational leadership on employees' performance by considering the mediating role of their organizational commitment. For this, the authors used questionnaires and documented the responses from 231 female nurses in various hospitals operating in Riyadh, Saudi Arabia. For analysis purpose, the study applied a descriptive, correlational, and regression research designs. The findings revealed that organizational commitment had a mediating role between the transformational leadership and employees' (nurses') job performance. Moreover, transformational leadership positively affects the job performance through their commitment to hospitals. The study suggests that hospital's management must do the necessary arrangements in order to implement and practice the transformational leadership to further enhance the job performance of their paramedical staff. This study recommends the future research to be conducted on a much larger scale by taking the other forms of leadership and their impact on employees' performances.

KEYWORDS

transformational leadership, job performance, organizational commitment, hospitals, Saudi Arabia.

INTRODUCTION

In the contemporary work environment, organizations are facing unlimited challenges in their ways of achieving the organizational goals. For instance, their customers demand high-quality goods and services at affordable price (Almutairi, 2016; Alade & Windapo, 2020)¹. Hence, the significance of employees' commitment and performance has been increased in demand as compared to previous years. In this regard, Deal and Kennedy (2000) has already suggested that the performance the employees and in turn, the organizations might be enhanced by promoting commitment in the organizational culture. Researchers are agreed that the individual employee's performance is accumulated into the overall organizational performance (Fontannaz & Oosthuizen, 2007)². In addition, the individual employee's performance is enhanced by the organizational commitment; hence, higher the commitment, higher will be their performance (Suliman & Iles, 2000; Liou, 2008; Rantesalu *et al.*, 2017; Paramita *et al.*, 2020)³. Furthermore, as reported by Wasti (2003), organizational commitment has also a negative relationship with employees' turnover ratio which in turn enhances their performance (Jaramillo *et al.*, 2005)⁴. Besides this, a better employee's performance leads to an enhanced organizational effectiveness (Cummings & Schwab, 1973)⁵. Along with these obvious factors, the leadership style has also an important role to play in enhancing their overall performance. Hence, a competent leadership has great influence over their employees in the organization to produce higher outcomes (Mosadeghard, 2003)⁶. A very strong stream of literature has shown significant relationship among employee's commitment, his performance with the leadership style (see Dionne *et al.*, 2004; Bass & Riggio, 2006; Sergent & Stajkovic, 2020)⁷. These studies have witnessed a strong positive impact of effective leadership styles on the employees' commitment and in turn the performance of the firms. Despite all these documented empirical works, there is little known to the academics about the

¹ Alade, K., & Windapo, A. O. (2020). Developing effective 4IR leadership framework for construction organisations. *Engineering, Construction and Architectural Management*

² Fontannaz, S., & Oosthuizen, H. (2007). The development of a conceptual framework to guide sustainable job performance. *South African Journal of Business Management*, 38(4), 9-19.

³ Suliman, A., & Iles, P. (2000). Is continuance commitment beneficial to organizations? Commitment-performance relationship: A new look. *Journal of Managerial Psychology*, 15(5), 407-422. <http://dx.doi.org/10.1108/02683940010337158>

⁴ Jaramillo, F., Mulki, J. P., & Marshall, G. W. (2005). A meta-analysis of the relationship between organizational commitment and salesperson job performance: 25 years of research. *Journal of Business Research*, 58(6), 705-714. <http://dx.doi.org/10.1016/j.jbusres.2003.10.004>

⁵ Cummings, L., & Schwab, D. (1973). *Performance in organizations: Determinants and appraisal*. Scott Foresman, Glenview, Illinois.

⁶ Mosadeghard, A. M. (2003). The Role of Participative Management (Suggestion System) in Hospital Effectiveness and Efficiency. *Research in Medical Sciences*, 8(3), 85-89.

⁷ Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational leadership and team performance. *Journal of Organizational Change Management*, 17(2), 177-193. <http://dx.doi.org/10.1108/09534810410530601>

mediating role organizational commitment between transformational leadership style and employee's performance (Yousef, 2000; Yeh & Chien, 2012). The authors of this study strongly believe that this study would definitely add to the existing body of knowledge by empirically investigating the impact of transformational leadership on the performance of the nursing employees in Saudi hospitals by taking the mediating role of organizational commitment. We are optimistic that the findings of our study would help the leaders in a better understanding of the impacts of their leadership styles on the employees commitment and their performance in the hospitals of Saudi Arabia. This study is consisted on 5 sections; the first section introduces the background of the study, the second section presents the existing and relevant literature, the third section explains the methodology, the results and discussion is reported in fourth section, and the fifth section concludes the study.

1. LITERATURE REVIEW

To get a better understanding of the phenomenon on hand, this section provides adequate discussion on each factor of the study from the existing documented scholarly works.

1.1 Leadership and its Styles

According to Kuchler (2008)⁸, leadership is the most studied and documented theme all over the world. The role and importance of leadership in the effectiveness of contemporary organization is quite visible and agreed upon. In the presence of plethora of definitions given by numerous authors, it is never easy to define leadership. However, most commonly leadership is considered as a process that completes with the interaction between the leader and the follower(s). In this process, the leader is capable to influence the follower to achieve the desired and mutual goal (see Yukl, 2005; Northouse, 2010)⁹. Leadership's "style" is the approach by which leaders influence the followers, give them directions, and get their goals (Amirul & Daud, 2012)¹⁰. Depending upon the leadership style that is adopted by the leaders might either motivate or demotivate the followers and in turn their performance might increase or decrease respectively (Belonio, 2012)¹¹. All this made numerous researchers to work on various leadership styles and developed a number of leadership theories.

⁸ Kuchler, W. J. (2008). Perceived leadership behavior and subordinates' job satisfaction in Midwestern NCAA Division III athletic departments. *The Sport Journal*, 11(2), 23-35.

⁹ Northouse, P. G. (2010). *Leadership, theory and practice* (5th ed.). Thousand Oaks, CA: Sage.

¹⁰ Amirul, S. R., & Daud, N. (2012). A study on the relationship between leadership styles and leadership effectiveness in Malaysian GLCs. *European Journal of Business and Management*, 4(8), 193-201.

¹¹ Belonio, R. (2012). The Effect of Leadership Style on Employee Job satisfaction and Performance of Bank www.ccsenet.org/ijbm International Journal of Business and Management Vol. 11, No. 1; 2016 238

These leadership theories could further be divided into four different categories based on: "trait", "behavior", "contingency", and either "transformational" or "transactional" (see Doyal & Smith, 1999)¹². However, more recently, the researchers have more focused on the "transformational" and "transactional" traits of leadership over the other leadership traits. In transformational leadership style, a leader enhances the awareness level of his followers about the value from desired results and expands their needs and wants accordingly (Bass, 1985)¹³. One step ahead, Schepers *et al.* (2005)¹⁴ argued that transformational leadership instill creativity and analytical problem solving abilities in their followers and they become highly equipped to understand and resolve their work issues in a better way. Transformational leaders also have the capability to reduce the job related stress of their employees and hence minimizes the burnout effects (Gill *et al.*, 2006)¹⁵. In a nut shell, the transformational leadership brings more satisfaction and overall positive effects for their employees in the work environment (see Kirkpatrick & Locke, 1996; Parry, 2000; Farler & Haan, 2021)¹⁶. The transformation leadership style as compared to other forms of leaderships has the advantage to enhance the loyalty of its followers and hence, increase the trust and self-esteem for them (Barling *et al.*, 1996; Nothouse, 2009)¹⁷. Therefore, the transformational leadership is considered as the best form of leadership where the leader-follower relationship nurtures and they are highly motivated as compared to the transactional leadership (Panagopoulous & Dimitriadis, 2009)¹⁸. Mosadeghard (2003) reported several leadership styles including "autocratic", "bureaucratic", "laissez-faire", "democratic", "participative", "situational", "transactional", and "transformational" etc. However, he concluded that in contemporary work environment the leadership style is shifting from autocratic to democratic and from transactional to transformational leaderships (the same was also reported by Dess *et al.*, 1998)¹⁹. Researchers have identified a number of characteristics for the effective leadership styles including:

¹² Doyle, M. E., & Smith, M. (1999). *Born and bred?: Leadership, heart and informal education*. London: YMCA George Williams College

¹³ Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

¹⁴ Schepers, J., Wetzels, M., & de Ruyter, K. (2005). Leadership styles in technology acceptance: Do followers practice what leaders preach? *Managing Service Quality*, 15(6), 496-508. <http://dx.doi.org/10.1108/09604520510633998>

¹⁵ Gill, A. S., Flaschner, A. B., & Shachar, M. (2006). Mitigating stress and burnout by implementing transformational-leadership. *International Journal of Contemporary Hospitality Management*, 18(6), 469-481. <http://dx.doi.org/10.1108/09596110610681511>

¹⁶ Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership

¹⁷ Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827. <http://dx.doi.org/10.1037/0021-9010.81.6.827>

¹⁸ Panagopoulous, N., & Dimitriadis, S. (2009). Transformational Leadership as a Mediator of the Relationship between Behavior-based Control and Salespeople's Key Outcomes. *European Journal of Marketing*, 43(7), 1008-1031.

¹⁹ Dess, G. G., Picken, J. C., & Lyon, D. W. (1998). Transformational Leadership. *Journal of Managerial Issues*, 10, 30-44.

innovation, motivation, vision, and hope. Most of these traits are the natural ingredients of the “transformational” leaders; hence, making it a best leadership style among all other types. Moreover, transformational leadership is the most effective when it comes to retaining the employees in the organizations (see e.g. Fletcher, 2001; Dvir *et al.*, 2002; Berggren & Severinsson, 2003; Marques *et al.*, 2021)²⁰. To sum, majority of the researchers are unanimously agreed upon on the fact that transformational leadership is the most effective leadership style that motivates the followers the most as compared to other styles of leaderships (Kirkman *et al.*, 2009)²¹. This is the reason that this study has taken it for the evaluating the factor of job performance of the employees.

1.1 Employee Performance

One of the significant determinant of organizational performance is the employee’s job performance (Wall *et al.*, 2004)²². Employee’s performance is the measurement of an individual’s contribution towards a task in terms of both quality and quantity (Schermerhorn, 1989). Furthermore, the employee’s performance is the collection of employees behavior that might be measured, monitored, and evaluated in terms of achievement at individual’s level (Munchinsky, 2003)²³. As explained by Schermerhorn (1989)²⁴, when a mission is accomplished it leads to employee’s performance in terms of both quality and quantity. Keeping in view the importance of employee’s performance, numerous researchers have conducted their studies in this area (Park *et al.*, 2003; Tessema & Soeters, 2006; Kahya, 2009; Phoung & Vinh, 2020)²⁵. The performance of nurses in the hospitals is measured by the duties the performed. Performance at individual level of employees help in achieving and implementation of organizational strategies (Amos *et al.*, 2004)²⁶.

1.2 Organizational Commitment

Among the most researched topics in the area of organizational behaviour, the “organizational commitment” is one of them (Wasti, 2003). The reason might

²⁰ Fletcher, C. E. (2001). Hospital RNs' job satisfactions and dissatisfactions. *Journal of Nursing Administration*, 31(6), 324. <http://dx.doi.org/10.1097/00005110-200106000-00011>

²¹ Kirkman, B. L., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *The Academy of Management Journal ARCHIVE*, 52(4), 744-764. <http://dx.doi.org/10.5465/AMJ.2009.43669971>

²² Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., & Clegg, C. W. *et al.* (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1), 95-118. <http://dx.doi.org/10.1111/j.1744-6570.2004.tb02485.x> www.ccsenet.org/ijbm *International Journal of Business and Management* Vol. 11, No. 1;

²³ Muchinsky, P. M. (2003). *Psychology Applied to Work*. (7th ed. ed.). Belmont, CA:: Wadsworth.

²⁴ Schermerhorn, J. R. (1989). *Management for productivity* (3rd ed.). New York: John Wiley and Sons.

²⁵ Park, H. J., Mitsuhashi, H., Fey, C. F., & Björkman, I. (2003). The effect of human resource management practices on Japanese MNC subsidiary performance: A partial mediating model. *The International Journal of Human Resource Management*, 14(8), 1391-1406. <http://dx.doi.org/10.1080/0958519032000145819>

²⁶ Amos, T. L., Ristow, A., & Ristow, L. (2004). *Human Resource Management* (2nd ed.). Lansdowne: Juta and CoLtd.

be the significance of it while determining the objectives of the organization, the turnover and absenteeism of the employees, and their productivity (see Bushra *et al.*, 2011)²⁷. Organizational commitment is explained in different ways by different authors. For instance, it is referred to the sentiments which drive employees to be the parts of the organizations to be associated with the goals and values of these organizations (Henkin & Marchiori, 2003)²⁸.

Some researchers have defined it as an attitude that reflects the employees' loyalty with their organizations (e.g. Luthans, 2005)²⁹. A more comprehensive definition of organizational commitment would include three main factors i.e. a firm belief and acceptance in organizational values and goals by employees; their willingness to put substantial efforts to develop the organization; and a high inspiration to maintain the organizational position (Mowday *et al.*, 1979)³⁰. In a similar fashion, organizational commitment was supposed to have three major factor includeing "affective commitment", "continuous commitment", and "normative commitment" (Mayer & Allen, 1991)³¹. Additionally, they further defined an "affective commitment" to the employee's emotiona attachment with their organization that comprised of beliefs and desires regarding organization's goals achievements. This "continuous commitment" explains the employee's obligatory feelings to be attached to the organization. Lastly, the "normative" commitment is grounded upon the cost committed by the employee if he wishes to leave the organization. Nonetheless, the "affective" commitment is comparatively more significant for employees and considered as highly benefical to organization (Meyer & Allen, 1997)³². In addition, "affective" commitment has gained significant attention in the existing literature (see such as Mathieu & Zajac, 1990; Meyer *et al.*, 2002)³³. Employees who are affectively committed to their organizations owns the qualities which include positive reactions towards their work environment and motivation to contribute to the goals of their organizations (Meyer & Allen, 1997)³². Throughout this study, the organizational commitment actually reflects the affective commitment.

²⁷ Bushra, F., Usman, A., & Naveed, A. (2011). Effect of Transformational Leadership on Employees' Job Satisfaction and Organizational Commitment in Banking Sector of Lahore (Pakistan). *International Journal of Business and Social Science*, 2(18), 261-267.

²⁸ Henkin, A. B., & Marchiori, D. M. (2003). Empowerment and organizational commitment of chiropractic faculty. *Journal of Manipulative and Physiological*

²⁹ Liou, S. (2008). An analysis of the concept of organizational commitment. *Nursing Fórum*, 43(3), 116-125. <http://dx.doi.org/10.1111/j.1744-6198.2008.00103.x> luthans, F. (2005). *Organizational Behavior* (10th ed.). New York: McGraw-Hill.

³⁰ Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247. [http://dx.doi.org/10.1016/0001-8791\(79\)90072](http://dx.doi.org/10.1016/0001-8791(79)90072)

³¹ Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89. [http://dx.doi.org/10.1016/1053-4822\(91\)90011-Z](http://dx.doi.org/10.1016/1053-4822(91)90011-Z)

³² Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA.: Sage publications, inc.

³³ Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194.

<http://dx.doi.org/10.1037/0033-2909.108.2.171>

1.1 Connection among Transformational Leadership, Employees' Performance, and Organizational Commitment

The existing literature shows a significant impact of leadership style on the employee's commitment towards the organization. These studies have reported that if the employees in the organizations have a pleasant relationship with their leaders they feel strong attachment to their organizations (Stup, 2006)³⁴. Leaders have the ability to influence the behavior of their followers; hence, they are expected to develop the commitment of employees towards the organization to achieve the organizational objectives. In this connection, the role of leadership style is very critical that affects the commitment level of their employees (Ramachandran & Krishnan, 2009)³⁵. According to Chen and Aryee (2007)³⁶, the organizational commitment shows that individual's goals are identical to the organizational goals and these encourage employees' productivity and loyalty to their organizations. Therefore, organization's commitment may increase the employees' performance. The leadership style might have impacts on the behavior, satisfactions, and performance that might in turn impact the levels of organizational commitment (see Bass, 1985)³⁷. Nonetheless, several researches have linked the "transformation" leadership style to the employees' performance (such as Raja & Palanichamy, 2011)³⁸. A significant positive impact of transformational leadership on employees' performance was reported by several research studies (see e.g. Geyery & Steyrer, 1998; Dvir *et al.*, 2002; Howell *et al.*, 2005; Deluga & Souza, 2011; Donkor *et al.*, 2021)³⁹. They found significant relationship between the two factors. Similarly, along with employee's performance a significant and positive impact of transformational leadership on organizational commitment was also reported by Thamrin (2012)⁴⁰. There are also a group of researchers who have examined the impact of organizational commitment on employee's performance. In this regard, the studies conducted by Morris and Sherman (1981)⁴¹ and Meyer *et al.* (1989) revealed that organizational commitment is a significant determinant of employee performance.

³⁴ Stup, R. E. (2006). Human resource management and dairy employee organizational commitment: Pennsylvania State University.

³⁵ Ramachandran, S., & Krishnan, V. (2009). Effect of transformational leadership on followers' affective and normative commitment: Culture as moderator. *Great Lakes Herald*, 3(1), 23-38.

³⁶ Chen, Z. X., & Aryee, S. (2007). Delegation and employee work outcomes: An examination of the cultural context of mediating processes in China. *Academy of Management Journal*, 50(1), 226-238. <http://dx.doi.org/10.5465/AMJ.2007.24162389>

³⁷ Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

³⁸ Raja, A. S., & Palanichamy, P. (2011). Leadership styles and its impact on organizational commitment. *The Journal of Commerce*, 3(4), 17-18.

³⁹ Geyery, A. L. J., & Steyrer, J. M. (1998). Transformational leadership and objective performance in banks. *Applied Psychology*, 47(3), 397-420. <http://dx.doi.org/10.1111/j.1464-0597.1998.tb00035.x>

⁴⁰ Thamrin, H. M. (2012). The influence of transformational leadership and organizational commitment on job satisfaction and employee performance. *International Journal of Innovation, Management and Technology*, 3(5), 566-572.

⁴¹ Morris, J. H., & Sherman, J. D. (1981). Generalizability of an organizational commitment model. *Academy of Management Journal*, 24(3), 512-526. <http://dx.doi.org/10.2307/255572>

Besides these initial studies, some latest studies have also shown same results for these two factors (see for example, Suliman & Iles, 2000; Meyer *et al.*, 2002; Chi *et al.*, 2007; Rusmawati & Indriati, 2020)⁴². Specifically, a positive significant impact of transformation leadership style on the organizational commitment was explored by Barbuto (2005), Lee (2010), and Mert *et al.* (2010). On the other hand, the mediating effect of organizational commitment between transformational leadership style and employee's performance was also exposed by some researchers (see e.g. Clugston, 2000; Suliman, 2002; Wang, 2006; Chi *et al.*, 2007; Ying & Ahmad, 2009; Yeh & Hong, 2012; Rusmawati & Indriati, 2020)⁴³. A somewhat similar study but with slightly different results conducted by Wells and Peachey (2011)⁴⁴ who combined the impact of leadership style, job satisfaction and the turnover intention of the employees with organizational commitment as mediator and reported the significant role of organizational commitment as mediator between the leadership style and employee job performance. Keeping in view the aforementioned discussion about the role of transformation leadership, organizational commitment, and employees' job performance, this study proposes the following set of hypotheses for further analysis:

H₁: Transformation leadership has a significant impact on employees' performance.

H₂: Transformation leadership has a significant impact on the organizational commitment.

H₃: The affective organizational commitment has a significant impact on employee's performance.

H₄: The affective organizational commitment has a mediating role in explaining the relationship between transformational leadership and employees' performance.

2. RESEARCH METHODOLOGY

2.1 Study Design and Sample

The study is descriptive and correlational in nature and in design. Moreover, the data regarding the sample respondents were collected via

⁴² Suliman, A., & Iles, P. (2000). Is continuance commitment beneficial to organizations? Commitment-performance relationship: A new look. *Journal of Managerial Psychology*, 15(5), 407-422. <http://dx.doi.org/10.1108/02683940010337158>

⁴³ Clugston, M. (2000). The mediating effects of multidimensional commitment on job satisfaction and intent to leave. *Journal of Organizational Behavior*, 21(4), 477-486. [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(200006\)21:4<477::AID-JOB25>3.0.CO;2-7](http://dx.doi.org/10.1002/(SICI)1099-1379(200006)21:4<477::AID-JOB25>3.0.CO;2-7)

⁴⁴ Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., & Clegg, C. W. et al. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1), 95-118. <http://dx.doi.org/10.1111/j.1744-6570.2004.tb02485.x> www.ccsenet.org/ijbm *International Journal of Business and Management* Vol. 11, No. 1;

questionnaire. Four largest public sector hospital including "King Fahad National Guard Hospital", "Shimasy Hospital", "Yamama Hospital", and "the Military Hospital" from Riyadh city were included in the population of the study. For deriving the sample from the population, a "simple random sampling (SRS)" technique under the random sampling was chosen based on its vast applicability and acceptability. Initially, a total of two hundred and eighty (280) questionnaires were distributed among the femal nursing staff in these four hospitals. However, out of these 280 questionnaires only 242 were returned back to the author of this study by these respondents. Furthermore, even in these 242 questionnaires, the author has to exclude eleven (11) questionnaires as the the responses in them were "invalid". Hence, the final sample was reduced to only 231 questionnaires that signified a 82.5% of response rate.

2.1 Measurement of the Responses

The questionnaire for data collection was adopted from Bass and Avolio (1995⁴⁵) who used a "Multifactor Leadership Questionnaire (MLQ)" to measure the "transformational leadership style" as an independent factor. Furthermore, the questionnaire instrument comprised on twenty items that were measured on a five-point Likdert scale (i.e. starting from "1" for "not at all", "2" for "once in a while", "3" for "sometimes", "4" for "fairly often", and "5" for "frequently, if not always"). To measure the "employee's job performance" which is the dependent variable of the study, the designed suggested by Stevens *et al.* (1978) wase used that examined four items applying the five-point Likert scales i.e. "1" for "very low" to "5" for "very high". On the scale, the first and second items were denoting the "quality" and "productivity" respectively and the third and fourth items were observing the "employee's performance" in comparison to other similar peer's jobs. To measure our mediating variable i.e. "effective organizational commitment", the authors used the questionnaire applied by Meyer, Allen, and Smith (1993) and Meyer and Allen (1997). For this purpose, the questionnaire contained eighteen items i.e. six items against each scale. The responses from the respondents were collected on a five-point Likert scale i.e. "1" for "strongly disagree", "2" for "disagree", "3" for "neither agree nor disagree", "4" for "agree", "5" for "strongly agree". Nonetheless, this part of the instrument (questionnaire) comprises of several inverse statements. In accordance to Dillman (2007)⁴⁶, this is suggested for the scalar response categories to have a consistent direction throughout the entire instrument. Thus, all these items are positively phrased. For instance, "I do not feel like 'part of the family' in my organization" has been modified to "I feel like 'part of the family' in my organization". The reliability of

⁴⁵ Bass, B. M., & Avolio, B. J. (1995). Manual for the multifactor leadership questionnaire: Rater form (5X short). Palo Alto, CA: Mind Garden.

⁴⁶ Dillman, D. A. (2007). Mail and internet surveys: The tailored design method (2nd ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Nunnally, 1978), if reliability proves to be less than 0.6 then it is poor, if 0.7 then it is acceptable, and if the coefficient value is equal or greater than 0.8 then it is considered as "good". In our case, all the instruments proved to be "acceptable" given the criteria set by Nunnally (1978)⁴⁷. Overall, the Cronbach Alpha values were 0.85, 0.77, and 0.74 for transformational leadership style, employee's performance, and effective organizational commitment respectively. The summary statistics were reported in the form of "frequency" and "percentage" served to describe respondent's features e.g. their ages and their number of years of experiences. To examine the relationship among the study variables i.e. transformation leadership (independent variable), effective organizational commitment (mediating variable), and employee's job performance (dependent variable), this study applied the "Pearson's Correlation Coefficient". As a general rule (see Sekaran, 2003), the correlation between two variables happened to in the range from -1 to +1 (-1 is perfectly inversely related and +1 is perfectly positively related). As suggested by Baron and Kenny (1986)⁴⁸, to evaluate the mediating variable, a 3-step regression is applied. The first step shows the impact of mediating variable on the independent variable. The second step shows the impact of independent variable on the dependent variable. Finally, the third step shows the results after the inclusion of mediating factor (Kiskis, 2017). The third step mainly focuses on the mediating variable and the effect of independent variable almost diminishes. This clearly indicates that the effective organizational commitment has a significant mediating effect between the transformational leadership and employee's job performance. A partial mediation would hold if the relationship between the independent variable is significant and smaller when the mediating is in the equation than when the mediator is not. Nevertheless, in a hierarchical (stepwise regression), the computation of any partial or semi-partial correlation are not important (Baron & Kenny, 1986)⁴⁸.

3. DATA ANALYSIS AND RESULTS

3.1 Sample's Demographics

Table 1 below reports the data about the respondents including their age, experiences, frequencies, and percentages. So, according to this table, the total number of respondents of the study were 231. Furthermore, 21.2% of the respondents were from the age 20 to 26 years with 49 frequencies. Similarly, from 27 to 33 years of the respondents were 37.5% and their frequencies were 86. 23.1% of the respondents were in the range from 34 to 40 years with

⁴⁷ Nunnally, J. C. (1978). Psychometric theory. New York: McGraw-Hill.

⁴⁸ 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(6), 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>

frequency equals to 53. The second half of the table shows about the experience status of the respondents in their respective organizations. For instance, 72 respondents were having 1 to 5 years experience, 59 were having 6 to 10 years' experience, 43 respondents having 11 to 15 years and only 17 and 16 respondents were having 16 to 20 years and more than 21 years of experiences respectively.

Table 1: Observations on Respondents' Demographics

Variables	Frequencies	Percentages
Age (from 20 to 26 years)	49	21.2%
Age (from 27 to 33 years)	86	37.5%
Age (from 34 to 40 years)	53	23.1%
Age (from 41 to 47 years)	23	9.8%
Age (from 48 to 54 years)	11	4.9%
Age (54 and more years)	09	4.1%
Experience (from 01 to 05 years)	72	37.5%
Experience (from 06 to 10 years)	59	32.3%
Experience (from 11 to 15 years)	43	16.4%
Experience (from 16 to 20 years)	17	8.9%
Experience (21 and more years)	16	5.2%

Source: Author's own compilation from collected responses on the demographics

3.2 Pearson's Correlation Test

To examine the association among the study variables, this study applied the "Pearson's Correlation" test (see table 2 below). From the table, it is cleared that the transformational leadership style has a significant correlation with employees' job performance (Miller & Wager, 2017). More specifically, the coefficient value is 0.895 which is positive and significant at 1% level. Similarly, transformational leadership has also shown a positive significant relationship with organizational commitment (again at 1% level) and the coefficient value is 0.580. Furthermore, there is also a positive and significant association between employee job performance and effective organizational commitment (i.e. at 1% level significance with coefficient value is 0.59). Hence, the first three hypotheses of the study i.e. H₁, H₂, and H₃ have been accepted in light of the Pearson's correlation results (as presented in table 2 below). To sum these results, we can interpret that as the organizational commitment by the employees increase their job related performance also increases. Moreover, their performance also improves if the leader or manager practices the transformational leadership style in the work environment.

Table 2: Correlation between the study variables

	Transformational Leadership	Employee Job Performance	Organizational Commitment
Transformational Leadership	1	0.895**	0.580**
Employee Job Performance		1	0.591**
Organizational Commitment			1

**Correlation is sig. at 1% level (two-tailed)

3.3 Pearson's Correlation Test

To identify whether the effective organizational commitment has been playing the role of mediator between transformational leadership and employee's job performance, a three step regression process was applied on the data (as did Baron & Kenny, 1986). According to these researchers, the organizational commitment would have a significant mediating effect between the dependent and independent variables if it fulfills the following conditions:

- Specific to this case, the mediation effect will exist if the mediating factor (i.e. the effective organizational commitment) is get affected by the independent variable (i.e. transformational leadership style) in first regression,
- In the second regression, it is expected that independent variable (transformational leadership style) will affect the dependent variable (i.e. employees' job performance) in a significant way, and (Pitts, 2017) In the second equation after the inclusoure of the mediating variable (i.e. effective organizationa commitment) in the equation, the relationship between independent and dependent variables become significantly minimized. However, the mediating and dependent variables show significant relationship (Rao, 2017).

Hence, looking into the mediation process (by table 3), the step one shows that "transformational leadership style" seems to affect the organizational commitment (i.e. $\beta = 0.580$, $P < 0.001$). In step two, the transformational leadership style impacts the employee job performance (i.e. $\beta = 0.895$, $P < 0.001$). Finally, in step three, when the effective organizational commitment (the mediating variable) is included in the regression equation, effective organizational commitment has a direct significant impact on the employee's job performance, and "transformational leadership style" yet affects employee's job performance. However, the regression coefficients of "transformational leadership style" and employee job performance is reduced from 0.95 to 0.833 ($p < 0.001$). This exhibits that effective organizational commitment partially mediates the relationship among transformationa leadership style and employee's job performance. Therefore, H_4 is supported. From these

findings it is derived that via the process of effective organizational commitment, transformation leadership style might increase the employee’s job performance.

Fig. 1 shows the path analysis model of mediation.

Table 3: Regression Analysis

Step	Independent Variable	Dependent Variables	β	R ²	Adjusted R ²
1	Transformational Leadership Style	Affective Organizational Commitment	0.580* **	0.337	0.334
2	Transformational Leadership Style	Employee’s Job Performance	0.895* **	0.801	0.811
3	Transformational Leadership Style Affective Organizational Commitment	Employee’s Job Performance	0.833* ** 0.108* *	0.809	0.807

Note: * $p < 0.05$; ** $p < 0.001$

The regression coefficients in the table 3 above are standard coefficient.

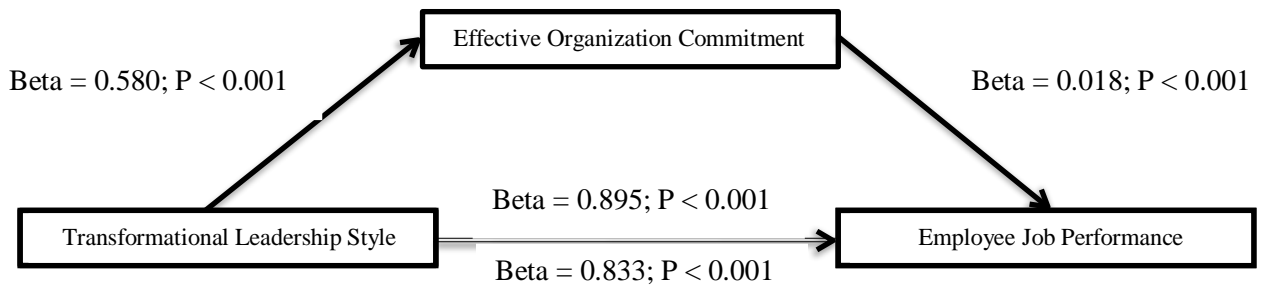


Fig. 1: Path Analysis Model for Mediation

4. DISCUSSION AND CONCLUSIONS

The main objective of this research was to investigate the association among “transformational leadership style”, “effective organizational commitment”, and “employee’s job performance” among the female nurses in context of public hospitals in Saudi Arabia. The results of this research explored that transformational leadership style has a positive and significant impact on the employee’s performance. The findings of current study are inlined with the existing studies e.g. Geyery and Steyrer (1998), Dvir *et al.* (2002), Howell *et al.* (2005), Deluga and Souza (2011), Thamrin (2012); Rusmawati and Indriati (2020); Hafeez *et al.* (2021). This study also showed the significant impact of

effective organizational commitment and employees job performance which is consistent with the previous studies (such as Morris & Sherman, 1981; Benkhoff, 1997; Suliman & Iles, 2000; and Chi *et al.*, 2007; (Zhang *et al.*, 2017) among others). Moreover, this study's findings also revealed a direct significant impact of transformational leadership and organizational commitment. These findings are similar as reported by existing researchers (see for instance, Barbuto, 2005; Yiing & Ahmad, 2009; Lee, 2010; Mert *et al.*, 2010; Rusmawati & Indriati, 2020). Finally, the partial mediating role played by effective organizational commitment was reported by this study is also reported as such by Chi *et al.* (2007), Yeh and Hong (2012), and Mufti *et al.* (2020) (Uygur *et al.*, 2017).

This study presents insights from the context of Saudi Arabia which are quite consistent with the earlier studies. The major contribution of this study to the existing body of knowledge is that employee's job performance is significantly and positively affected by transformational leadership and the effective organizational commitment plays the role of mediator between these two variables. In other words, the female nurses in the public hospitals are more committed and produces higher job performance in the existence of transformational leadership style. The authors are confident that the current research would assist the managers particularly in the public health sectors. Furthermore, relying on the findings of this study, the managers and supervisors in these hospitals would surely prefer to adopt transformational leadership style to boost the nurses' commitment towards their hospitals and would likely to enhance their job performance. The administration at public hospitals are advised to train their managers particularly they should teach them how to practice the transformational style of leadership.

The potential limitations of this study particularly in context of Saudi public hospitals were:

- This study only considered the "transformational leadership style" and ignored the other popular styles of leaderships such as "transactional" and "laissez-faire". These might also be considered in the future research studies.
- The scope of the study was only limited to Riyadh and the data from respondents were collected through a structured questionnaire. However, the future research studies could consider the other cities of Saudi Arabia and might also be conducted on comparative basis. Moreover, apart from the questionnaire, the researchers might also consider the other sources of data such as interviews and personal observations

REFERENCES

1. Alade, K., & Windapo, A. O. (2020). Developing effective 4IR leadership framework for construction organisations. *Engineering, Construction and Architectural Management*.
2. Amirul, S. R., & Daud, N. (2012). A study on the relationship between leadership styles and leadership effectiveness in Malaysian GLCs. *European Journal of Business and Management*, 4(8), 193-201.
3. Amos, T. L., Ristow, A., & Ristow, L. (2004). *Human Resource Management* (2nd ed.). Lansdowne: Juta and CoLtd.
4. Barbuto, J. E. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. *Journal of Leadership & Organizational Studies*, 11(4), 26-40. <http://dx.doi.org/10.1177/107179190501100403>
5. Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827. <http://dx.doi.org/10.1037/0021-9010.81.6.827>
6. 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(6), 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
7. Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
8. Bass, B. M., & Avolio, B. J. (1995). *Manual for the multifactor leadership questionnaire: Rater form (5X short)*. Palo Alto, CA: Mind Garden.
9. Bass, B. M., & Avolio, B. J. (1997). *The Full Range Leadership Development Manual for the Multifactor Leadership Questionnaire*. Redwood City, CA: Mind garden.
10. Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Lawrence Erlbaum.
11. Belonio, R. (2012). The Effect of Leadership Style on Employee Job satisfaction and Performance of Bank www.ccsenet.org/ijbm International Journal of Business and Management Vol. 11, No. 1; 2016 238
12. Benkhoff, B. (1997). Ignoring commitment is costly: New approaches establish the missing link between commitment and performance. *Human Relations*, 50(6), 701-726. <http://dx.doi.org/10.1177/001872679705000604>
13. Berggren, I., & Severinsson, E. (2003). Nurse supervisors' actions in relation to their decision-making style and ethical approach to clinical supervision. *Journal of Advanced Nursing*, 41(6), 615-622. <http://dx.doi.org/10.1046/j.1365-2648.2003.02573.x>
14. Bushra, F., Usman, A., & Naveed, A. (2011). Effect of Transformational Leadership on Employees' Job Satisfaction and Organizational Commitment in Banking Sector of Lahore (Pakistan). *International Journal of Business and Social Science*, 2(18), 261-267.
15. Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80(4), 468-478. <http://dx.doi.org/10.1037/0021-9010.80.4.468>
16. Chen, Z. X., & Aryee, S. (2007). Delegation and employee work outcomes: An examination of the cultural context of mediating processes in China. *Academy of Management Journal*, 50(1), 226-238. <http://dx.doi.org/10.5465/AMJ.2007.24162389>
17. Chi, H., Tsai, H., & Chang, P. (2007). Investigating the relationship among leadership styles, emotional intelligence and organization commitment on job performance: A study of salespeople in Thailand. *The Journal of Human Resource and Adult Learning*, 3(2), 199-212.
18. Clugston, M. (2000). The mediating effects of multidimensional commitment on job satisfaction and intent to leave. *Journal of Organizational Behavior*, 21(4), 477-486. [http://dx.doi.org/10.1002/\(SICI\)1099-1379\(200006\)21:4<477::AID-JOB25>3.0.CO;2-7](http://dx.doi.org/10.1002/(SICI)1099-1379(200006)21:4<477::AID-JOB25>3.0.CO;2-7)
19. components on performance and attitudes. *Journal of Applied Psychology*, 81(1), 36. <http://dx.doi.org/10.1037/0021-9010.81.1.36>

20. Cummings, L., & Schwab, D. (1973). Performance in organizations: Determinants and appraisal. *Scott Foresman*. Glenview, Illinois.
21. Deal, T. E., & Kennedy, A. A. (2000). *Corporate cultures: The rites and rituals of corporate life*: Basic Books.
22. Deluga, R. J., & Souza, J. (2011). The effects of transformational and transactional leadership styles on the influencing behaviour of subordinate police officers. *Journal of Occupational Psychology*, 64(1), 49-55. <http://dx.doi.org/10.1111/j.2044-8325.1991.tb00540.x>
23. Dess, G. G., Picken, J. C., & Lyon, D. W. (1998). Transformational Leadership. *Journal of Managerial Issues*, 10, 30-44.
24. Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed.). Hoboken, NJ: John Wiley & Sons, Inc.
25. Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational leadership and team performance. *Journal of Organizational Change Management*, 17(2), 177-193. <http://dx.doi.org/10.1108/09534810410530601>
26. Donkor, F., Dongmei, Z., & Sekyere, I. (2021). The Mediating Effects of Organizational Commitment on Leadership Styles and Employee Performance in SOEs in Ghana: A Structural Equation Modeling Analysis. *SAGE Open*, 11(2), 21582440211008894.
27. Doyle, M. E., & Smith, M. (1999). *Born and bred?: Leadership, heart and informal education*. London: YMCA George Williams College.
28. Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance. *Academy of Management Journal*, 45(4), 735-744. <http://dx.doi.org/10.2307/3069307>
29. Employee in Bankgkok. *AU-GSB- e-Journal.*, 5(2), 111-116.
30. Farler, D. W., & Haan, P. (2021). Effective Leadership in the Engineering, Technology, and Construction Industry. *Journal of Construction Materials*, 2, 4-8.
31. Fletcher, C. E. (2001). Hospital RNs' job satisfactions and dissatisfactions. *Journal of Nursing Administration*, 31(6), 324. <http://dx.doi.org/10.1097/00005110-200106000-00011>
32. Fontannaz, S., & Oosthuizen, H. (2007). The development of a conceptual framework to guide sustainable job performance. *South African Journal of Business Management*, 38(4), 9-19.
33. Geyery, A. L. J., & Steyrer, J. M. (1998). Transformational leadership and objective performance in banks. *Applied Psychology*, 47(3), 397-420. <http://dx.doi.org/10.1111/j.1464-0597.1998.tb00035.x>
34. Gill, A. S., Flaschner, A. B., & Shachar, M. (2006). Mitigating stress and burnout by implementing transformational-leadership. *International Journal of Contemporary Hospitality Management*, 18(6), 469-481. <http://dx.doi.org/10.1108/09596110610681511>
35. Guest, D. E. (1997). Human resource management and performance: A review and research agenda. www.ccsenet.org/ijbm International Journal of Business and Management Vol. 11, No. 1; 2016 239 *International Journal of Human Resource Management*, 8(3), 263-276. <http://dx.doi.org/10.1080/095851997341630>
36. Hafeez, A., Khan, M. M., & Ahmad, W. (2021). Influence of Leadership Styles on Organizational Culture, Technology Acceptance, Knowledge Management Process & Capabilities on Organizational Performance. *International Research Journal of Management and Social Sciences*, 2(2), 74-85.
37. Henkin, A. B., & Marchiori, D. M. (2003). Empowerment and organizational commitment of chiropractic faculty. *Journal of Manipulative and Physiological Therapeutics*, 26(5), 275-281. [http://dx.doi.org/10.1016/S0161-4754\(03\)00043-5](http://dx.doi.org/10.1016/S0161-4754(03)00043-5)
38. Howell, J. M., Neufeld, D. J., & Avolio, B. J. (2005). Examining the relationship of leadership and physical distance with business unit performance. *The Leadership Quarterly*, 16(2), 273-285. <http://dx.doi.org/10.1016/j.leaqua.2005.01.004>
39. Jaramillo, F., Mulki, J. P., & Marshall, G. W. (2005). A meta-analysis of the relationship between organizational commitment and salesperson job performance: 25 years of research. *Journal of Business Research*, 58(6), 705-714. <http://dx.doi.org/10.1016/j.jbusres.2003.10.004>
40. Kahya, E. (2009). The effects of job performance on effectiveness. *International Journal of Industrial Ergonomics*, 39(1), 96-104.

- <http://dx.doi.org/10.1016/j.ergon.2008.06.006>
41. Kirkman, B. L., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. B. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *The Academy of Management Journal ARCHIVE*, 52(4), 744-764. <http://dx.doi.org/10.5465/AMJ.2009.43669971>
 42. Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership
 43. Kiskis, M. (2017). Intellectual Property Challenges for the Modern Biotechnology Enterprise: An Overview. *Journal of Commercial Biotechnology*, 23(1). <https://doi.org/10.5912/jcb767>
 44. Kuchler, W. J. (2008). Perceived leadership behavior and subordinates' job satisfaction in Midwestern NCAA Division III athletic departments. *The Sport Journal*, 11(2), 23-35.
 45. Lee, H. W. (2010). Relationship between leadership style and organizational commitment. *Operating Management Review*, 6(1), 87-95.
 46. Liou, S. (2008). An analysis of the concept of organizational commitment. *Nursing Fórum*, 43(3), 116-125. <http://dx.doi.org/10.1111/j.1744-6198.2008.00103.x>
 47. Luthans, F. (2005). *Organizational Behavior* (10th ed.). New York: McGraw-Hill.
 47. Marques, M. D. F. M., David, C. L. A. H. P., Santos, M. A. F. D., Neves, S. C. D. S., Pinheiro, M. J. F., & Leal, M. T. S. (2021). Perceptions of senior nursing students regarding clinical decision-making. *Revista Brasileira de Enfermagem*, 74.
 48. Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194. <http://dx.doi.org/10.1037/0033-2909.108.2.171>
 49. Mert, I. S., Keskin, N., & Baş, T. (2010). Leadership style and organizational commitment: Test of a theory in Turkish banking sector. *Journal of Academic Research in Economics*, 2(1), 1-20.
 50. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89. [http://dx.doi.org/10.1016/1053-4822\(91\)90011-Z](http://dx.doi.org/10.1016/1053-4822(91)90011-Z)
 51. Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA.: Sage publications, inc.
 52. Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551. <http://dx.doi.org/10.1037/0021-9010.78.4.538>
 53. Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D., & Jackson, D. N. (1989). Organizational commitment and job performance: It's the nature of the commitment that counts. *Journal of Applied Psychology*, 74(1), 152-156. <http://dx.doi.org/10.1037/0021-9010.74.1.152>
 54. Miller, H. I., & Wager, R. (2017). Agricultural Biotechnology Is Much More Than Herbicide-Tolerant Crops. *Journal of Commercial Biotechnology*, 23(1). <https://doi.org/10.5912/jcb776>
 55. Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20-52. <http://dx.doi.org/10.1006/jvbe.2001.1842>
 56. Morris, J. H., & Sherman, J. D. (1981). Generalizability of an organizational commitment model. *Academy of Management Journal*, 24(3), 512-526. <http://dx.doi.org/10.2307/255572>
 57. Mosadeghard, A. M. (2003). The Role of Participative Management (Suggestion System) in Hospital Effectiveness and Efficiency. *Research in Medical Sciences*, 8(3), 85-89.
 58. Mosadeghrad, A. M. (2003). *Principles of Health Care Administration*. Tehran: Dibagran Terhran. www.ccsenet.org/ijbm International Journal of Business and Management Vol. 11, No. 1; 2016 240
 59. Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224-247. [http://dx.doi.org/10.1016/0001-8791\(79\)90072](http://dx.doi.org/10.1016/0001-8791(79)90072)
 60. Muchinsky, P. M. (2003). *Psychology Applied to Work*. (7th ed. ed.). Belmont, CA.: Wadsworth.
 61. Mufti, M., Xiaobao, P., Shah, S. J., Sarwar, A., & Zhenqing, Y. (2020). Influence of

- leadership style on job satisfaction of NGO employee: The mediating role of psychological empowerment. *Journal of Public Affairs*, 20(1), e1983.
62. Northouse, P. G. (2009). *Leadership: Theory and practice* (5th ed.). California: Sage Publications, Inc.
63. Northouse, P. G. (2010). *Leadership, theory and practice* (5th ed.). Thousand Oaks, CA: Sage.
64. Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill.
65. Panagopoulous, N., & Dimitriadis, S. (2009). Transformational Leadership as a Mediator of the Relationship between Behavior-based Control and Salespeople's Key Outcomes. *European Journal of Marketing*, 43(7), 1008-1031.
66. Paramita, E., Lumbanraja, P., & Absah, Y. (2020). The Influence of Organizational Culture and Organizational Commitment on Employee Performance and Job Satisfaction as a Moderating Variable at PT. Bank Mandiri (Persero), Tbk. *International Journal of Research and Review*, 7(3), 273-286.
67. Park, H. J., Mitsuhashi, H., Fey, C. F., & Björkman, I. (2003). The effect of human resource management practices on Japanese MNC subsidiary performance: A partial mediating model. *The International Journal of Human Resource Management*, 14(8), 1391-1406. <http://dx.doi.org/10.1080/0958519032000145819>
68. Pitts, P. J. (2017). 21st Century Pharmacovigilance: Intuition, Science, and the Role of Artificial Intelligence. *Journal of Commercial Biotechnology*, 23(1). <https://doi.org/10.5912/jcb766>
69. Parry, K. (2000). Does leadership help the bottom line? *Management-Auckland*, 47(3), 38-41.
70. Phuon, T. T. K., & Vinh, T. T. (2020). Job satisfaction, employee loyalty and job performance in the hospitality industry: A moderated model. *Asian Economic and Financial Review*, 10(6), 698-713.
71. Porter, L., Steers, R., Mowday, R., & Boulian, P. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603-609. <http://dx.doi.org/10.1037/h0037335>
72. Raja, A. S., & Palanichamy, P. (2011). Leadership styles and its impact on organizational commitment. *The Journal of Commerce*, 3(4), 17-18.
73. Ramachandran, S., & Krishnan, V. (2009). Effect of transformational leadership on followers' affective and normative commitment: Culture as moderator. *Great Lakes Herald*, 3(1), 23-38.
74. Rantesalu, A., Mus, A. R., & Arifin, Z. (2017). The effect of competence, motivation and organizational culture on employee performance: the mediating role of organizational commitment.
75. Rusmawati, P. H., & Indriati, F. (2020). EXAMINE THE RELATIONSHIP AMONG TRANSFORMATIONAL LEADERSHIP, ORGANIZATIONAL COMMITMENT AND WORK ENGAGEMENT ON EMPLOYEE PERFORMANCE. *International Journal of Management (IJM)*, 11(8).
76. Rao, S. K. (2017). R&D Spending & Success: Key Trends, Issues & Solutions. *Journal of Commercial Biotechnology*, 23(1). <https://doi.org/10.5912/jcb772>
77. Schepers, J., Wetzels, M., & de Ruyter, K. (2005). Leadership styles in technology acceptance: Do followers practice what leaders preach? *Managing Service Quality*, 15(6), 496-508. <http://dx.doi.org/10.1108/09604520510633998>
78. Schermerhorn, J. R. (1989). *Management for productivity* (3rd ed.). New York: John Wiley and Sons.
79. Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). New Jersey: John Willey & Sons.
80. Sergent, K., & Stajkovic, A. D. (2020). Women's leadership is associated with fewer deaths during the COVID-19 crisis: Quantitative and qualitative analyses of United States governors. *Journal of Applied Psychology*, 105(8), 771.
81. Stevens, J. M., Beyer, J. M., & Trice, H. M. (1978). Assessing personal, role, and organizational predictors of managerial commitment. *Academy of Management Journal*, 21(3), 380-396. <http://dx.doi.org/10.2307/255721>
82. Stup, R. E. (2006). Human resource management and dairy employee organizational commitment: Pennsylvania State University.
83. Suliman, A. (2002). Is it really a mediating construct?: The mediating role of

- organizational commitment in work climate-performance relationship. *Journal of Management Development*, 21(3), 170-183.
<http://dx.doi.org/10.1108/02621710210420255>
84. Suliman, A., & Iles, P. (2000). Is continuance commitment beneficial to organizations? Commitment-performance relationship: A new look. *Journal of Managerial Psychology*, 15(5), 407-422.
<http://dx.doi.org/10.1108/02683940010337158>
85. Tessema, M. T., & Soeters, J. L. (2006). Challenges and prospects of HRM in developing countries: Testing the HRM-performance link in the Eritrean civil service. *The International Journal of Human Resource Management*, 17(1), 86-105.
<http://dx.doi.org/10.1080/09585190500366532>
86. Thamrin, H. M. (2012). The influence of transformational leadership and organizational commitment on job satisfaction and employee performance. *International Journal of Innovation, Management and Technology*, 3(5), 566-572.
87. Udo, G. J., Guimaraes, T., & Igbaria, M. (1997). An investigation of the antecedents of turnover intention for manufacturing plant managers. *International Journal of Operations & Production Management*, 17(9), 912-930.
<http://dx.doi.org/10.1108/01443579710171280>
88. Uygur, B., Duberman, J., & Ferguson, S. M. (2017). A Guide to Time lag and Time lag Shortening Strategies in Oncology-Based Drug Development. *Journal of Commercial Biotechnology*, 23(1). <https://doi.org/10.5912/jcb792>
89. Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., & Clegg, C. W. et al. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1), 95-118. <http://dx.doi.org/10.1111/j.1744-6570.2004.tb02485.x>
www.ccsenet.org/ijbm International Journal of Business and Management Vol. 11, No. 1;
90. Zhang, J., Chen, Y., & Li, Y. (2017). Analysis of Genetically Modified Food Induced International Trade Law Issues. *Journal of Commercial Biotechnology*, 23(1). <https://doi.org/10.5912/jcb774>