

Transformational Leadership Practices and Excellence in the Public Family Planning Sector in Egypt

Hanady Samy Ahmed^{1*}, Heba Mahmoud ELweshahi²
and Ayman Ahmed Ragab³

¹Master of Healthcare Quality Management, Arab Academy for Science, Technology, and Maritime Transport AASTMT, Alexandria, Egypt.

²Alexandria University, Faculty of Medicine, Alexandria, Egypt.

³Dean of Graduate School of Business GSB /Arab Academy for Science, Technology, and Maritime Transport AASTMT, Alexandria, Egypt.

Emails: hanady.samy@gmail.com, heba.elweshahi@alexmed.edu.eg, aaragab@aast.edu

Received on, 08 August 2024 - Accepted on, 02 September 2024 - Published on, 14 October 2024

ABSTRACT:

There are current challenges facing family planning sector in Egypt. They are significantly associated with the population problem in Egypt that might act as a barrier against achieving Egypt Vision 2030. Effective leadership is a window of hope towards resolving such challenges. The study aimed at assessing followers' perception of transformational leadership (TSL) at public family planning sector and identifying the relation between transformational leadership behavior and achieving excellence. A cross-sectional study included 148 family planning providers to assess their perception towards commitment of leaders with transformational leadership practices using a structured transformation leadership questionnaire that consists of 20 statements covering the four domains namely Idealized Influence, Inspirational Motivation, Individual Considerations and Intellectual Stimulation.

The mean score for all domains of transformational leadership varied slightly from 2.1 to 2.2 with a minimum of 0 and a maximum of 4. Similarly, the total TSL score ranged from 0.7 to 3 with a mean of 2.2±0.5. The average total score of transformational leadership for providers working at excellence awarded clinics was 2.4 compared to 2.0 for non-excellent clinics and this difference was statistically significant. Similar difference was found in all individual domains. The study concluded that a positive but not optimal level of transformational leadership practices in this healthcare setting was perceived by providers. This highlights areas for potential improvement. Developing transformational leadership capabilities could be

a key strategy for public family planning settings aiming to improve their operational performance and hence achieving the ultimate goal for such important sector.

KEYWORDS:

Transformational leadership; Followers' perception; Family Planning; Excellence.

1. Introduction

Transformational leadership (TSL) is a style of leadership where leaders work with their teams to identify needed change, creating a vision to guide the change through inspiration, and executing the change in tandem with committed members of the group.⁽¹⁾ This leadership style is characterized by four primary domains namely idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.⁽²⁾

Bass and Riggio (2006) elucidate that the primary dimension involves idealized influence, in which a transformational leader exemplifies elevated standards of ethical and moral behavior and serves as a role model for employees. Consequently, the leader garners respect and admiration through a dual influence of behavior and attributed qualities. The second dimension pertains to inspirational motivation, wherein the transformational leader displays enthusiasm and optimism, motivating and inspiring followers by presenting them with challenges. The third dimension, intellectual stimulation, sees the transformational leader fostering creativity and innovation by integrating

followers' viewpoints in problem-solving and decision-making processes. The fourth dimension, individualized consideration, underscores the leader's role as a coach or mentor who attentively addresses individual differences and requirements of followers. Proficiency in active listening is crucial as it facilitates personalized interactions between the leader and followers.⁽²⁾

Followers' perceptions of transformational leadership behaviors are crucial, as these perceptions can significantly impact their motivation, satisfaction, and performance. Studies have shown that when followers perceive their leaders as transformational, they are more likely to feel empowered and committed to the organization.⁽³⁾ This perception is influenced by how well leaders embody the characteristics of the four domains mentioned above. Followers who see their leaders engaging in ethical behavior, inspiring through a clear vision, fostering a culture of innovation, and providing individualized support are more likely to respond positively and exhibit higher levels of job satisfaction and organizational commitment.⁽⁴⁾

Transformational leadership can be measured quantitatively using several validated instruments. They usually consist of several behaviors that reflect each domain. The most widely used tool is the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1995).⁽⁵⁾ Other instruments were structured by authors in many previous studies that fulfill the same purpose.⁽⁶⁻⁹⁾ Moreover, qualitative approaches might be used to measure TSL such as interviews and case studies.⁽¹⁰⁾

Generally, adopting transformational leadership style as compared to transactional and laissez-faire leadership styles in governmental organizations was found to be associated with better employees' job performance and organizational efficiency.⁽¹¹⁾ Adoption of transformational leadership within healthcare environments has been correlated with a variety of favorable organizational consequences. Within the healthcare sector, transformational leaders are connected with heightened levels of staff contentment, diminished turnover intentions, and enhanced patient care results.^(12,13) To illustrate, research indicates that transformational leadership can booster job satisfaction and diminish burnout among healthcare worker, factors that are crucial for upholding a high-caliber patient care setting.⁽¹⁴⁾

Moreover, transformational leadership fosters a culture of continuous improvement and innovation that intellectually stimulate their staff, and encourage the adoption of new practices and technologies, which are essential in the rapidly evolving healthcare sector.⁽¹⁵⁾

Family planning (FP) sector is one of the healthcare sectors. In Egypt, there is an increasing need to achieve performance excellence and decrease variations in service provision. These in turn help to get client satisfaction, increase the demand for family planning services, decrease unmet health needs for contraceptives as measures to control the population problem in Egypt in the way to achieve Egypt 2030 vision and sustainable development goals.⁽¹⁶⁾

The implementation of transformational leadership within the family planning sector could prove to be a valuable strategy for attaining the intended objectives. The current study aimed at assessing the perception of providers working in the public Family Planning Clinics in Alexandria, Egypt about how transformation leadership is practiced by their management staff. Furthermore, the research sought to uncover the association between the applying transformational leadership style by leaders and the attainment of superior performance within Family planning settings.

2. Methods

A cross-sectional study was completed over a 3-month period (September 2023 – December 2023). The research was conducted in the public clinics of Family Planning and Reproductive Health in Alexandria at the primary healthcare units and inside the public and central hospitals. The number of the targeted FP clinics in Alexandria is 134 clinics situated in both urban and semi-urban areas. the minimum sample size was calculated based on expected mean percent score for transformational leadership among nurses of 80% as reported by Ismael et al. 2024⁽¹⁷⁾ at 95% confidence level considering the total number of target population in the study settings (N=420). this yielded a minimum sample of 140. A random sample of the FP service providers currently in charge in the FP clinics in Alexandria were included in the study. Sampling was done using multistage stratified random sampling technique as 30 randomly selected clinics were selected from all health districts. From each selected clinic two physicians, three nurses and one community health workers were selected randomly. The response rate was nearly 97% for physicians, 79% for nurses and 73% for community health workers

Data were collected from all family planning providers included in the cross-sectional survey using a self-administered questionnaire that includes two main sections:

- Background characteristics: Personal and occupational characteristics: age, highest educational level, current job, clinic location (urban or rural) and whether it had got the evaluation of excellence before and how many times.
- Transformational leadership behavior

questionnaire: This questionnaire comprises 20 statements divided into four main domains: Individual consideration (5 items), intellectual stimulation (4 statements), inspirational motivation (6 statements) and idealized influence (Charisma) (5 statements). Each statement is answered at 5-point Likert scale (not at all, once in a while, sometimes, often, all the time). It was distributed in a printed anonymous form.

The questionnaire was developed by authors in Arabic language after reviewing literature and based on the theoretical framework developed by Bass and Riggio (2006).^(2,6-9,18-19)

The questionnaire was subjected to expert validation and reliability test. Three experts, one from Ministry of Health and Population and two staff members from the Faculty of Business (do you mean the College of Management and Technology at the Academy or the Faculty of Commerce??) examined the instrument for content validity. The mean validity index generated ranged from 0.89 to 0.97, which means that the questionnaire content validity was "Very Good".⁽²⁰⁾

It was also tested on randomly selected fifty participants for internal consistency reliability using Cronbach's alpha for the total composite scale as well as its individual domains. Moreover item-total correlation for each domain and correlation between the whole questionnaire and each domain scores were tested and the results are shown in table 1.

Table 1: Internal consistency reliability and domain total correlation of the transformation leadership questionnaire

	Cronbach's alpha	Domain total correlation	Item total correlation
Individual considerations	0.896	0.898*	0.752-0.857
Intellectual arousal	0.743	0.847*	0.46-0.88
Ideal influence	0.872	0.897*	0.677-0.867
Inspirational motivation	0.877	0.867*	0.762-0.833
The whole questionnaire	0.949		

A copy of the protocol was submitted to the Research Committee at Ministry of Health and Population for approval. Participation of family planning providers was voluntary after taking a written consent. The questionnaire was anonymous and confidentiality was ensured. It was declared that data will be used only for research purpose.

3. Data Analysis

Data were entered and checked for errors using IBM SPSS Version 22. Qualitative variables were presented using frequency tables, however quantitative data were presented using range, mean and standard deviation. Quantitative data were tested for normality using Shapiro-Wilk test that revealed normal distribution of data. Regarding TSL questionnaire, response to each statement was scored as follows: not at all=0, rarely=1, sometimes=2, often=3 and always=4. A total score for each domain was calculated by adding the individual items scores and divided by number of statements in each domain. The mean score for each domain was calculated. Similarly, the average total score was calculated with a maximum possible score of 4. The total score was calculated as percent score and a score of $\geq 75\%$ was considered adequate. Comparison between groups was done using T test and One-way ANOVA for quantitative variable and chi-square test for qualitative variables. Conclusion was done at 5% level of significance.

4. Results

Description of Studied FP Providers

Regarding age of included FP providers, half of participants (50.0%) are over 45 years old. Nearly a third (30.4%) were between 36-45 years old. The smallest age group is 35 years or younger, comprising 19.6% of the sample. For the highest attained education, the most common education level was secondary education (37.8%). Nearly one fourth (24.3%) of them were high institute graduates. The remaining two fifths were either university graduates or have a post-graduate degree (20.3%,17.6 %, respectively).

Regarding the current job of participants, nurses made up nearly half of them (49.3%). Physicians were the second largest group at 39.2%. Community health workers account for 11.5% of studied group. The majority of workers (73.6%) work in urban clinics/center, however one quarter (26.4%) works in rural clinics.

Descriptive Statistics of Perceived Transformational Leadership Scores

Table 2 provides a detailed description of the four domains and total scores of transformational leadership practices as perceived by the studied FP workers. The domains assessed include Individual Considerations, Intellectual Arousal, Ideal Influence, and Inspirational Motivation, along with the overall score for the entire questionnaire. Table 2 shows that the mean score for all domains varied slightly from 2.1 to 2.2 with a minimum of 0

and a maximum of 4. Similarly, the total TSL score ranged from 0.7 to 3 with a mean of 2.2 ± 0.5 .

Table 2: Descriptive statistics of perceived transformational leadership scores among studied workers at family planning settings, in Alexandria

	Range	Mean \pm Sd
• Individual considerations	0.4–3	2.2 \pm 0.5
• Intellectual arousal	0–3	2.1 \pm 0.6
• Ideal influence	0.8–4	2.2 \pm 0.5
• Inspirational motivation	0.3–3	2.1 \pm 0.5
• The whole questionnaire	0.7–3	2.2 \pm 0.5

Relation between Perceived TSL and Employees' Characteristics

Table 3 presents the Total Transformational Leadership (TL) scores in relation to the baseline characteristics of the study participants, focusing on age, education level, and job type. For age, participants were divided into three groups: ≤ 35 years, 36–45 years, and > 45 years. The TSL scores for these groups were 2.1 ± 0.5 , 2.2 ± 0.5 , and 2.2 ± 0.5 , respectively. There were no significant differences in TSL scores among the different age groups ($p=0.902$). When considering education levels, participants were categorized into four groups: secondary education, high institute, university, and higher education. There were no significant differences between groups regarding total TSL score as $P=0.313$. Regarding job type, the participants were grouped as physicians, nurses, and community health workers. Their TSL scores did not differ between the three categories as $P > 0.05$.

Table 3: Total transformation leadership score in relation to the employees' characteristics at family planning settings, in Alexandria

Baseline characteristics	Total Transformational Leadership score Mean \pm Sd	Test of significance
Age		
≤ 35 years	2.1 \pm 0.5	F#=0.103 P=0.902
36–45	2.2 \pm 0.5	
>45	2.2 \pm 0.5	
Education		
Secondary education	2.1 \pm 0.4	F#=1.197 P=0.313
High Institute	2.1 \pm 0.4	
University	2.2 \pm 0.7	
Higher education	2.3 \pm 0.5	

Job		
Physician	2.2 \pm 0.6	F#= 2.782 P=0.06
Nurse	2.1 \pm 0.4	
Community health worker	2.4 \pm 0.3	

#: F ratio for ANOVA test

Relation between Applying

Transformational Leadership Practices as Perceived by the Studied Workers and Achieving Excellence

Table 4 presents a comparison of Transformational Leadership (TSL) scores between followers working at family planning clinics that have received excellence awards and those that have not. The table shows that in the domain of Individual Considerations, employees whose clinics earned excellence-award scored an average of 2.4, significantly higher than the 2.1 which is the average of non-awarded clinics. Similarly, for Intellectual Arousal, excellent clinics averaged 2.3 compared to 1.9 for others. The Ideal Influence domain showed excellent clinics scoring 2.4 on average, while others scored 2.1. Lastly, in Inspirational Motivation, excellent clinics averaged 2.3, outperforming the 2.1 average of non-excellent clinics. All these differences were statistically significant, with p-values less than 0.05 across all domains and the total score. In accordance, the total TL score further emphasized this trend, with average total score for employees working at excellence awarded clinics was 2.4 compared to 2.0 for non-excellent clinics. Importantly, all these differences were statistically significant, with p-values less than 0.05 across all domains and the total score.

Table 5 shows that the total percent score was for perceived TSL considered to be adequate if 75%. By comparing perception of TSL between workers. A significantly higher percentage of employees working at excellence-awarded clinics showed adequate TSL practices ($\geq 75\%$) as compared to employees at non-awarded clinics (40.6 % as compared to 10.7%)

Table 4: Perceived transformational leadership scores in relation to excellence award

TL domains	Excellence N= 64	No excellence N= 84	Test of significance
Individual considerations			t=3.296 P=0.001*
Min-Max	0.8–3.2	0.4–3.0	
Mean \pm Sd	2.4 \pm 0.5	2.1 \pm 0.5	

Intellectual arousal			t=3.485 P=0.001*
Min-Max	0.4-3.3	0.2-3.0	
Mean±Sd	2.3± 0.6	1.9 ±0.6	
Ideal influence			t=3.170 P=0.002*
Min-Max	0.8-3	0.8-4	
Mean±Sd	2.4± 0.4	2.1 ±0.5	
Inspirational motivation			t=3.354 P=0.002*
Min-Max	1-4	0.3-3	
Mean±Sd	2.3 ±0.5	2.1± 0.5	
Total			t=4.130 P<0.001*
Min-Max	1-3	0.7-3	
Mean±Sd	2.4 ± 0.5	2.0.±0.4	

t: test value for independent samples t test, *: Significant at p< 0.05

Table 5 : Distribution of studied workers according to their perceived transformational leadership and clinic excellence

Transformation leadership total percent score	Excellence N= 64 N(%)	No excellence N= 84 N(%)	Test of significance Chi-square test
Inadequate (<75% score)	38(59.4)	75(89.3)	X ² = 17.9998 P<0.001*
Adequate (≥75% score)	26(40.6)	27(10.7)	

5. Discussion

Transformational leadership is a valuable approach in the healthcare sector, offering numerous benefits for employees, organizations, and patients. It was found that by adopting TSL behaviors, healthcare leaders can drive positive changes, enhance team performance, and improve patient care quality.^(21,22) It is crucial to assess the level of commitment with transformational leadership at family planning sector and explore the mechanisms through which transformational leadership affects outcomes in this critical sector.

The current cross-sectional study that included 148 FP providers at the public family planning sector in Egypt measured the healthcare workers' perceptions and experiences of the TSL practices exhibited by their managers or leaders, rather than just the leaders' own self-reported behaviors. It showed that The overall mean of 2.2 for the whole questionnaire suggests that, on average, followers perceive their leaders as demonstrating moderate levels of transformational leadership practices. Additionally, there are consistent scores across all dimensions (ranging from 2.1 to 2.2) that suggest a balanced approach to transformational leadership. This aligns with Bass and Avolio's (1994) concept of the "Full Range Leadership Model," which emphasizes the importance of employing all aspects of TSL.⁽²³⁾

While the scores are moderately high, there is

still room for improvement across all dimensions. This is consistent with findings from Wong and Cummings (2007) who noted in their systematic review that while TSL is present in healthcare, there is often potential for further development.⁽²²⁾

Variability in responses between followers indicates some variability in their perceptions regarding their leaders' behavior. This could reflect differences in individual practices that might be explained by individual variations, qualifications, training, years of experience or level of motivation.

Thorne and Wright (2005) proposed that leadership awards can serve as external validation of effective leadership practices and organizational culture.⁽²⁴⁾ In the current study the total TL score shows a significant difference (p<0.001) between employees work at organizations with excellence awards (mean 2.4 ± 0.5) and those without (mean 2.0 ± 0.4). Similarly, the individual domains scores for TL were significantly higher (p=0.001) in award-winning organizations. This suggests that family planning units/centers recognized for operational excellence demonstrate higher levels of TSL practices. In accordance with Hoch et al. (2018) in their meta-analysis as they found positive associations between TSL and various performance indicators.^(25,26) Similarly, several studies were conducted in healthcare settings linked TSL to improved work environments, job satisfaction and better quality of care in healthcare settings. Sfantou et al.'s (2017) findings linking TSL to improved quality of care.⁽²¹⁾ Moreover, Boamah et al. (2018) link transformational leadership to improved work environments and job satisfaction in healthcare settings.⁽¹⁴⁾ However, it is important to note that the relationship between leadership and organizational performance is complex and may be influenced by various contextual factors, such as organizational culture, resource availability, and external environmental conditions.⁽²⁷⁾

6. Study Limitations

While the study shows a clear association between excellence awards and TL practices, it is important to note that causality cannot be definitively established because it used a descriptive rather than analytic approach. Further studies are recommended with a methodology that ensures higher evidence for causality.

7. Conclusion

The findings of the current study demonstrate a positive but not optimal level of TSL practices in this healthcare setting. This highlights areas for potential improvement and further leadership development. Furthermore, the findings of the current study provide evidence for the association between transformational leadership practices and operational excellence in family planning

settings. They align with and extend the existing literature by demonstrating this relationship across all domains of TSL. This suggests that developing TSL capabilities using training could be a key strategy for public family planning settings aiming to improve their operational performance and hence achieving the ultimate goal for such important sector.

Conflicts of interests:

No conflicts of interests to be declared.

8. REFERENCES

- Steinmann B, Klug HJP, Maier GW. The path is the goal: How transformational leaders enhance followers' job attitudes and proactive behavior. *Front Psychol.* 2018;9(NOV).
- Bass BM, Riggio RE. Transformational leadership (2nd ed.). *Transformational leadership (2nd ed).* 2006;
- Avolio BJ, Zhu W, Koh W, Bhatia P. Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. Vol. 25, *Journal of Organizational Behavior.* 2004.
- Judge TA, Piccolo RF. Transformational and Transactional Leadership: A Meta-Analytic Test of Their Relative Validity. *Journal of Applied Psychology.* 2004 Oct;89(5):755–68.
- Bass BM, Avolio BJ. MLQ Multifactor Leadership Questionnaire for research. Mind Garden. 1995.
- Alkhaja BA & Minian CM. The Practice of Transformational Leadership Style in the Ministry of Labour and Social Development in the Kingdom of Bahrain. *European Journal of Business and Management.* 2019 Sep;
- Seval; TOKER D. Construction of a likert-type transformational Leadership Scale. *Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Dergisi - DTCF Dergisi.* 2017;57(2).
- Asencio H. Leadership, trust and organizational performance in the public sector. *Transylvanian Review of Administrative Sciences.* 2016;2016(Special Issue).
- Hardy L, Arthur CA, Jones G, Shariff A, Munnoch K, Isaacs I, et al. The relationship between transformational leadership behaviors, psychological, and training outcomes in elite military recruits. *Leadership Quarterly.* 2010;21(1).
- Antonakis John. Transformational and Charismatic Leadership. 2nd edition. Sage Publications; 2012. 299–319 p.
- Thanh NH, Quang N Van. Transformational, Transactional, Laissez-faire Leadership Styles and Employee Engagement: Evidence From Vietnam's Public Sector. *Sage Open.* 2022;12(2).
- Wong CA, Cummings GG, Ducharme L. The relationship between nursing leadership and patient outcomes: A systematic review update. *J Nurs Manag.* 2013;21(5).
- Mäntynen R, Vehviläinen-Julkunen K, Partanen P, Turunen H, Miettinen M, Kvist T. Changes in Transformational Leadership and Empirical Quality Outcomes in a Finnish Hospital over a Two-Year Period: A Longitudinal Study. *Nurs Res Pract.* 2014;2014.
- Boamah SA, Spence Laschinger HK, Wong C, Clarke S. Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nurs Outlook.* 2018;66(2).
- Thompson CA, Buchbinder SB, Shanks NH. Introduction to health care management. 2nd edition. Burlington, Mass.: Jones & Bartlett Learning; 2012. 91–108 p.
- Family planning [Internet]. 2016. Available from: <https://egypt.unfpa.org/en/node/22543>
- Ismael H, Sleem W, Abd el-Ghani A. Relationship Between Transformational Leadership Style and Job Satisfaction among Nurse. *Mansoura Nursing Journal.* 2024 Jan 1;11(1):357–68.
- Owuor Peter. Effects of transformational leadership style on organizational performance in kenya: a case study of kenya breweries limited [Internet]. The Management University of Africa ; 2918. Available from: <https://core.ac.uk/download/pdf/224836799.pdf>
- Ibrāhīm al-Ḥabīb Kh, Suḥaymān al-Shammarī A, Shāmān al-Ḥarbī S. al-Qiyādah al-taḥawwulīyah madkhal li-taḥsin al-adā' al-waḏīfī li-mu'allimāt al-marḥalah al-ibtidā'īyah bi-minṭaqat Ḥā'il – dirāsah mustaqbaliyyah. *Majallat Kulliyat al-Tarbiyah Jāmi'at Tanṭā* [Internet]. 2022 Oct 1;85(4):259–308. Available from: <https://mkmgt.journals.ekb.eg/>

20. Yusoff MSB. ABC of Content Validation and Content Validity Index Calculation. *Education in Medicine Journal*. 2019;11(2).
21. Sfantou DF, Laliotis A, Patelarou AE, Sifaki-Pistolla D, Matalliotakis M, Patelarou E. Importance of leadership style towards quality of care measures in healthcare settings: A systematic review. Vol. 5, *Healthcare (Switzerland)*. 2017.
22. Wong CA, Cummings GG, Ducharme L. The relationship between nursing leadership and patient outcomes: a systematic review update. *J Nurs Manag*. 2013 Jul;21(5):709–24.
23. Bass Bernard, Avolio Bruce. *Improving organizational effectiveness through transformational leadership*. 1994.
24. Thorne EA, Wright G. Developing strategic alliances in management learning. *Journal of European Industrial Training*. 2005;29(5).
25. Hoch JE, Bommer WH, Dulebohn JH, Wu D. Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis. *J Manage*. 2018;44(2).
26. Bottomley K, Burgess S, Fox M. Are the behaviors of transformational leaders impacting organizations? A study of transformational leadership. *International Management Review*. 2014;10(1).
27. Dinh JE, Lord RG, Gardner WL, Meuser JD, Liden RC, Hu J. Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. Vol. 25, *Leadership Quarterly*. 2014.