Original Article

Leadership effectiveness among nurse managers and its relationship with extrovert/introvert personality

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Abstract

BACKGROUND: Success in patient care and gain credit for the hospital depend on nurse staff competent and appetency, so they must be lead in suitable manners and it is nurse manager's duty that must have suitable personality and competency for powerful leadership. The purpose of this study is to assess the effectiveness of leadership and its relationship with extrovert/introvert personality.

METHODS: This is a descriptive correlation study. Samples were all 128 nurse managers of hospitals related to Isfahan University of Medical Science that were selected through census method. Data collection tool was questionnaire and data were analyzed by SPSS software.

RESULTS: Findings showed that majority of samples were extrovert between 50 to 75 percent, also most of the managers had powerful leadership effectiveness; there was a direct and meaningful correlation between leadership effectiveness and extroversion in supervisors ($r = 0.42$, $p = 0.01$) and head nurses ($r = 0.46$, $p = 0.0001$).

CONCLUSION: The correlation between leadership effectiveness and extroversion in supervisor and head nurse groups may be related to their various communications with others and different units employees.

KEY WORDS: Nurse manager, leadership effectiveness, personality.

There is no job more important than managers' job in our society.[1] Authorities believe that managers are organization leaders that are the most original sources in each institute.[2] Nowadays finding leaders who can increase success in the group which they work with, is the biggest difficulty in most organizations. The group function does not only depend on the leader; perhaps there are many factors, such as provocation of group members, their training scale and intelligence and skill, and organization support of leader which affect it; but, the manager personality, his/her motive and his/her behavior can assign the function more than other factors.[3] Today the major changes in health care organizations create necessity of combined leadership and management skills.[4] Giving the health and curative cares to all people with the least cost and the best quality is the original goal in each hospital and the nurses play the important role to achieve the hospital goals.[5] So they must be lead in suitable manners and it is the nurse managers' duty.[6]

The studies in past and recent decades about manager's leadership styles and using leadership skills in different countries show that the scale of using leadership skills in nurse manager is weak and many errors in nurses' performance are result of deficiency in leadership skills of nurse managers.[7] Also in the studies, the relationship between patient care quality, improvement personnel mentality and the effectiveness of leadership in nurse managers is

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conformed.[8] Also different studies have shown that the effective leading of managers has relation with personnel empowerment in work environment.[9] Kleinman in his study, aimed to assess the leadership behaviors, understood that the effective leading of nurse managers has direct relation with increasing job satisfaction and personnel retention. Shader et al study (2001) and Ribelin study (2003) also showed that the leadership effectiveness is the major factor in increasing nurses job satisfaction and retention.[10] Upenieks study also showed that effective nurse leaders are supportive, determined, expert, responsible and powerful persons.[11] Also Force study showed that some factors in nurse leaders are related with increasing job satisfaction and personnel retention such as: transformational leadership style, extroverted personality traits, autonomy and group cohesion and graduate education.[12] Regarding the above issues and because no study has done in this context in Iran yet, the researchers did this study to define leadership effectiveness, personality type and their relationship in nurse managers.

Methods

This is a descriptive correlation study. The purpose was to define leadership effectiveness and its relationship with extrovert/introvert personality in nurse managers. The research environment was educational hospitals which were related to Isfahan University of Medical Sciences. Because the society and research samples were equal, sampling has done through census method and all of the nurse managers in Isfahan educational hospitals in any managing position (Matron, supervisor, head nurse) who wanted to attend in the research and had worked in this position at least for six months and had at least associate of arts diploma in nursing, would participated in this research. Therefore all of the research units were 128 persons (9 matrons, 33 supervisors, 86 head nurses).

Data were gathered through a 3 section questionnaire: part 1 included some questions about nurse managers' demographic character-istics (age, sex, education, marriage status, management record, work record and management training). Part 2 was the leadership effectiveness questionnaire (type of leadership in which the leader has power and capability of leading one or more persons to achieve organization goals)[13] that contained 36 questions about effective leader characters: 1. leader as communication star (be a good auditor and speaker and create positive and stable relation with others),[14] 2. leader as follower creator (ability to convert subordinates to followers),[15] 3. leader as power symbol (manager use variety of power sources such as reward, punishment, specialty and legal power),[16] 4. leader as decision maker (expertise and proficiency of great decisions making,[17] 5. leader as visionary (drawing clear vision and define future goals and desires of organization),[18] 6. leader as positive force (creator of appetency in organization).[19] This part of questionnaire was distinct according to Likhert scale from "agree completely" to "disagree completely". For "disagree completely" the score was 1, for "disagree" it was 2, for "agree" 3 and for "agree completely" the score was 4. According to these scores results would be described as: powerful leading (120-144), good leading (100-119), leading that need more effort (80-99) and poor leading (< 80).[14] Part 3 was Kantel "Five-Factor personality" questionnaire, included 44 questions about personality dimensions (extraversion, agreeableness, openness to experience, neuroticism and conscientiousness) that also was distinct as Likhert scale from "agree completely" to "disagree completely". In each personality dimensions the maximum score was counted according to the number of same dimension questions and each person's score was counted according to the person's selected answers. If the person mark is near to the maximum score it is said that this dimension will be powerful and if the person score is far from the maximum score it is said that this dimension will be weak.[20] For comfort after accounting distinction it was counted according to 100 base. To determine validity of effective leadership questionnaire which is in one of authentic man-

agement books, content validity method was used and the questionnaire was sent to 10 venerable academic members and they was used their issues in development or correction of questionnaire. To confirm translation reliability of personality questionnaire to Persian the questionnaire was sent to 10 venerable psychology members and their issues were used in correction translation of questionnaire. For testing reliability of each questionnaire we used Cronbach's alpha test and the questionnaires were completed by 10 samples of research society which then eliminate from study then was accounted the consistency of questions so for leadership questionnaire alpha was 0.73 and with eliminate some questions from personality questionnaire alpha was 0.80. Data was analyzed using descriptive statistic (frequency distribution and mean) and inferential statistic (Pearson correlation test) using SPSS software.

Results

Data showed that the most frequency of samples (67.2%) was related to head nurses and the least frequency distribution (7.1%) was related to matrons. The majority of supervisors (51.5%) and head nurses (84.9%) were women and in matrons (55.6%) were men. In matrons 100%, in supervisors 87.9% and in head nurses 79.1% were married. The majority of samples in each group were 40-49 years old. The most samples

in matrons (88.9%) had 23-29 years job records and in supervisors (45.5%) and head nurses (40.7%) had 15-22 years job records. About 22.2% of matrons, 12.1% of supervisors and 4.7% of head nurses had management records over 20 years. In each group, the majority had the B.A and only 3 percent of supervisors and 2.3 percent of supervisors had the AA (associate of art diploma), also the most distribution of MA (22.2%) were in matrons.

The majority of samples in each group had 1-6 months of manager training and their training was formal. Data also showed that the majority of samples in all effective leading principals achieved 19-24 score, in other words they achieved 76-100 percent of the scores. In the leadership effectiveness majority of samples (77.8% of matrons, 66.7% of supervisors and 72.1% of head nurses) achieved 120-144 scores, in other words they had powerful leadership effectiveness (Table 1). Also the majority of samples were extrovert (50-75%) (Table 2). Also 22.2% of matrons, 27.3% of supervisors and 25.6% of head nurses had good leadership effectiveness. Leadership effectiveness in 6.1% of supervisors and 2.3% of head nurses needed more effort and in any of managers leadership effectiveness wasn't poor. According to data on supervisors (r = 0.42, P = 0.01) and head nurses (r = 0.46, P = 0.0001) there is a direct and meaningful correlation between leadership effectiveness and extraversion (Table 3).

Table 1. Relative frequency distribution of leadership effectiveness in nurse managers.

Effectiveness Manager's rate	Powerful (120-144)		Good (110-119)		Need more effort 80-99		Poor < 80		Mean (SD)
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Matron	7	77.8	2	22.2	0	0	0	0	124.7 (9.2)
Supervisor	22	66.7	9	27.3	2	6.1	0	0	123.06 (12.6)
Head nurse	62	72.1	22	25.6	2	2.3	0	0	124.5 (9.9)

Table 2. Relative frequency distribution and mean score of extraversion in nurse managers

Extraversion score Manager's position	< 50		50-75		76-100		Mean (SD)
	Number	Percent	Number	Percent	Number	Percent	
Matron	1	11.1	6	66.7	11	22.2	65.7 (10.3)
Supervisor	1	3	25	75.8	7	21.2	67.1 (10.9)
Head nurse	10	11.6	58	67.5	18	20.9	64.09 (14.1)

Table 3. Correlation between leadership effectiveness and extraversion

Effectiveness Manager's rate	r	p value
Matron	0.11	0.76
Supervisor	0.42	0.01
Head nurse	0.46	0.0001

Discussion

As mentioned before, the majority of samples in all of leadership effectiveness principals (leader as communication star, follower creator, power symbol, decision maker, visionary, and positive force) achieved maximum scores. In the communication field, Shaffer study (2003) showed that 40% of nurses believed that the effective communication and understanding the needs of one who directly is responsible for giving care to patients are the most important nurse leaders duty to achieve a care with high quality and cost effectiveness.[21] In Upenieks study (2003), 83% of nurse leaders believed that leader's access to formal and informal power is one of the leadership effectiveness factors.[11] In the decision making dimension researchers believe that because nurses must be success decision makers in giving nursing care to patients, if nurse managers become successful decision markers it can strengthen their personnel decision making power too. One of the most important characters of leadership effectiveness and main art of manager is their decision making and problem solving ability, so nurse manager must be aware of decision making methods for 2 reasons: 1) development of information in different fields of nursing because of scientific researches and nurse experiments necessitate manager to choose the best way from present knowledge, 2) participative management method and use of problem solving method make every manager to be familiar with scientific decision making method.[22]

In visionary dimension researchers believe that achieving high score is because of the establishment of Nurse Organization Setting in recent years which has strengthens this idea among nurse managers that for ending bewilderments and create consistent between em-

ployees they must be visionary persons. Now nurse managers believe that in the intolerable nursing profession in which the scale of job dissatisfaction, burn out and leaving the job is high, drawing vision for future can improve personnel morals, renew their power and energy and strengthen their cooperation morality.

Achieving high score in the positive force dimension is hopeful for nursing profession too, because nurses always face with pain and offense, disease and death and giving intolerable nursing care, so should continually renew their force otherwise they lose their energy gradually and prepare for biological and psychological complications. Working for 30 difficult years in nursing profession would be enjoyable and attractive only by encouragement of nurses. The result also showed that supervisors are more extrovert than matrons and matrons are more extrovert than head nurses. Also there is a direct and meaningful correlation between leadership effectiveness and extraversion in supervisors and head nurses.

In other words if supervisors and head nurses were more extrovert they would be more effective leaders. Researchers believe that no job is comparable in complicity to head nurse's role in hospitals and the main part of this complicated role is because they are in contact with different people, because they are the original axis of work and should answer nurse service staffs, internal hospital offices, discharging patients and their families. The researchers believe that the correlation between leadership effectiveness and extraversion in head nurses is for this reason and in supervisors because of their different communications with other employees in different hospital parts this result is acceptable. Kical and Neuman (2000),[23] Judge et al (2002),[23] Silverthone[24] and Khakpour study (2004),[25] also showed that more extroversion predicted more leadership effectiveness and improved job performance in managers, but Cormack and Mellor study (2002) showed that in military officers low extroversion predicted high leadership effectiveness.[26] Perhaps, because in nursing profession achieving optimal result and client's health need establishment of

extent humanistic communication between nurse managers, employees and clients, more extroversion predict high leadership effectiveness, but in military work itself and existing hierarchical levels (such as senior, junior, …) cause that low extroversion predict high leadership effectiveness. According to the results it is recommended that: 1) in selection of competent persons for management positions such as nurse managers it is necessary to use psychologist issues, 2) the results of research must be attended by top level managers in selecting competent persons for sensitive nursing management positions, for example more extroversion persons for head nurse and supervisor positions which predict high leadership effectiveness because manager personality effect their performance and can change their organization's decisions, 3) because personality is made on base of past and present of people's life and effect from learning and perceiving process, these results can be useful for managers to have more and better cognition of their personality traits and make necessary change in their personality dimensions. Because manager personality balances make a reliable perceive of them, employees that have feeling or moral difficulties can attract to a manager lovely center who has balanced personality and use their leading to solve their problems.

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