LEADER’S FEMININITY AND TRANSFORMATIONAL LEADERSHIP: MEDIATING ROLE OF LEADER’S EMOTIONAL INTELLIGENCE

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Abstract: Using a sample of 110 doctor-nurse dyads and data collected from 5 hospitals in southern India, this study shows how leader's gender (femininity and masculinity) and emotional intelligence affect transformational leadership. Results show that leader's emotional intelligence mediates the relationship between leader's femininity and transformational leadership. Masculinity is also positively correlated to emotional intelligence.

Keywords: Transformational leadership, emotional intelligence, femininity,

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“In nothing do men more nearly approach the gods than in giving health to men”, Cicero, the Roman philosopher once said. The modern health care system plays a pivotal role in this endeavor. One of the major factors that drive the performance of the health care system and make it a sustainable business in action is the doctor and nurse relationship. The quality of their interaction can make a direct impact on patient outcomes, personal morale and healthcare costs, all of which affect the overall value delivered by the hospital to the patients. There could be doctor-nurse disagreements, which might lead to disruptive behaviors in their interactions. Hence, motivating effective and high potential nurses creates a healthy culture for sustainable performance. Therefore, a climate of mutual respect and collaboration between the doctors and nurses is essential in the health care sector. Despite the importance of this relationship, very little research has been done on these lines, and therefore this area remains largely unexplored. This research study is an attempt towards bridging this gap.

Interpersonal interaction is of paramount importance in the healthcare sector and therefore most of the tasks associated with the daily routine of healthcare professionals use skills derived from emotional intelligence, especially while treating acute patient cases. The nurses spend more time with their patients than with their doctor. In this manner, the nurse serves as a bridge between the doctor and the patient. Therefore, to provide utmost service to the nurses, doctors must essentially motivate their nurses to the highest levels of performance through their influence, consideration, motivation and stimulation – the elements of transformational leadership.

THEORY AND HYPOTHESES

Gender

The terms sex and gender are often used interchangeably as are the adjectives male and masculine, female and feminine. These terms, however, need clarification. Whereas sex is the term used to indicate biological difference; gender is a social construct which is used to indicate psychological, social and cultural difference. This is a practice-based theory according to which sexuality is socially constructed; it is the difference (other than biological) between men and women.

Gender is etymologically derived from a Latin word, genus, meaning 'type', 'kind' or 'sort'. Sex relates to a biological category and refers to visible differences. Gender as a term relates to culture and refers to the assignment of various characteristics to each sex; it refers to what is normative or what is anticipated to be expected in men's and women's behavior. If the
appropriate terms for sex are male and female, the corresponding terms for gender are masculine and feminine; thus, gender is the amount of masculinity or femininity found in a person.

The concept of gender applies at different levels. It is: (1) a dimension of personal identity, a psychic process of experiencing self; (2) an element in social order, the foundation of social institutions such as kinship, sexuality, the distribution of work, politics, and culture; and (3) a cultural symbol which can be variously interpreted, the basis for normative dichotomies.

Genderism is a sex-class linked individual behavioral practice—a practice linked to gender as a class. Gender identity thus emerges from rearing patterns, and is not determined by hormones. Gender-roles may be looked upon as a set of norms prescribing the behaviors and activities of each sex. They are the norms that enable women and men to conduct themselves in a particular way and to play particular roles in the family and society. Gender stereotypes may be seen as shared sets of beliefs about the psychological traits of the different sexes. The social-role theory proposes that, as a general tendency, people are expected to engage in activities that are consistent with their culturally defined gender-roles (Eagly et al., 1995). These gender-roles spillover into the work place and become incorporated into the work-roles. Gender-roles affect gender identity and as a consequence of these differing social identities, women and men have somewhat different expectations about their own behavior in organizational settings.

Gender encompasses various concepts like gender identity, gender roles, gender stereotypes, and gender attitudes. Masculinity and femininity, or one's gender identities, refer to the degree to which people see themselves or others as masculine or feminine, given what it means to be a man or woman in the society. Masculinity and femininity are categories defined within culture, not by biological necessity. They are together part of a complex, dynamic, interwoven, cognitive, emotional, and social force. The understanding of the characteristics of gender is important because society uses gender as the basis for identity in determining roles at home, within organizations, and in the workplace. Societal expectations directly influence gender norms and decide what male and female means (Stets & Burke, 2000).

Hoffmann and Borders (2001) defined femininity as those characteristics like “compassion”, “tenderness,” etc., which are associated with the female sex. Conversely, masculinity refers to those characteristics associated with males. A typical description of masculinity stresses features such as 'hard, dry, impersonal, objective, explicit, outer-focused, action-oriented, analytic, dualistic, quantitative, linear, rationalist, reductionist, and materialist (Billing & Alvesson, 2001). Whereas instrumental traits such as independent, competitive, decisive, aggressive and dominant are more likely to be associated with the masculine gender, expressive traits such as helpful, emotional, understanding, compassionate, sensitive and interpersonally oriented are more likely to be associated with the feminine gender (Embry, Padgett & Caldwell, 2008).

Femininity is often defined in complementary and corresponding terms to masculinity. Femininity is a matter of 'the prioritizing of feelings…the importance of the imaginative and creative'. Female values are characterized by interdependence, cooperation, receptivity, merging, acceptance, awareness of patterns, wholes and context, emotional tone, personalistic perception, being, intuition and synthesizing (Billing & Alvesson, 2001).

Feminine people have a greater ability to encode and decode messages through nonverbal channels. They score significantly higher on social skills. They are described to be expressive, socially sensitive, and genuinely interested in other people. Leader roles, which favor task-related traits and feminine roles are seen by many as incompatible. This incongruity leads to a negative evaluation of women's leadership potential and their actual work performance (Moore, Grunberg & Greenberg, 2005).
The feminine and masculine are often seen as mutually exclusive and they are essentially related to the bodies of women and men. Masculinity and femininity have long been conceptualized as bipolar ends of a single continuum; therefore, a person can either be masculine or feminine but not both. This gender role dichotomy has served to obscure two very possible hypotheses: (1) many individuals may be “androgynous”; that is, they might be both masculine and feminine, both assertive and yielding, both instrumental and expressive, depending on situational appropriateness of the various behaviors; and (2) strongly gender-typed individuals might be limited in the range of behaviors available to them as they move from one situation to another (Bem, 1974). Gender identity was originally considered to be one-dimensional, either masculine or feminine, implying that if an individual was high on one characteristic, it means that the individual was low on the other. However psychologists now believe that the gender-characteristics can co-exist in an individual i.e. two-dimensional (Gill et al., 1987).

The highly sex-typed individuals are motivated to keep their behavior consistent with an internalized sex-role standard, a goal that they presumably accomplish by suppressing any behavior that might be considered undesirable or inappropriate for their sex. Thus, whereas a narrowly masculine self-concept might inhibit behaviors that are stereotyped as feminine, and a narrowly feminine self-concept might inhibit behaviors that are stereotyped as masculine, a mixed or androgynous self-concept might allow an individual to freely engage in both “masculine” and “feminine” behaviors (Bem, 1974).

Among the theories that yield predictions about the effectiveness of male and female leaders is the social-role theory of sex differences in social behavior, which maintains that as a general tendency people are expected to engage in activities that are consistent with their culturally defined gender roles. Social pressures external to individuals generally favor gender role consistent behavior, and, to some extent, people may internalize cultural expectations about their sex and consequently be intrinsically motivated to act in a manner consistent with their gender roles. Any such pressures favoring behavior congruent with one's gender role could be problematic for women occupying leadership or managerial roles because of the alignment of these social roles with stereotypically male qualities and therefore with the male gender role. By fulfilling people's expectations concerning leaders or managers, women may violate conventions concerning appropriate female behavior.

Gender stereotypes are shared views of personality traits often tied to one's sex. Gender attitudes are the views of others commonly associated with one's sex such as men thinking in terms of justice and women thinking in terms of care. Gender roles are defined as shared expectations of one's behavior given one's sex (Stets & Burke, 2000). Gender roles can be divided into two main categories: agentic or communal. Those who are competitive, self-confident, dominant, and influential are said to be having agentic traits. Men are primarily the individuals assumed to possess agentic qualities. Women are primarily the individuals assumed to possess communal characteristics like sympathy and affection, and thus roles tied to these traits are deemed to be feminine (Eagly & Johannesen-Schmidt, 2001). People tend to equate success with agentic behavior, and, therefore, do not consider a female who uses communal qualities as successful in the business world.

Perceived incongruity between the female gender role and typical leader role tends to create prejudice toward female leaders and potential leaders that takes two forms: (a) less favorable evaluation of women's (than men's) potential for leadership because leadership ability is more stereotypic of men than of women and (b) less favorable evaluation of the actual leadership behavior of women than men because agentic behavior is perceived as less desirable in women than in men. The first type of prejudice stems from the descriptive norms of gender roles—that is, the activation of descriptive beliefs about women's characteristics and the consequent ascription of female-stereotypic qualities to them, which are unlike the qualities expected and desired in leaders. The second type of prejudice stems from the
injunctive (or prescriptive) norms of gender roles—that is, the activation of beliefs about how women ought to behave. If female leaders violate these prescriptive beliefs by fulfilling the agentic requirements of leader roles and failing to exhibit the communal, supportive behaviors that are preferred in women, they can be negatively evaluated for these violations, even while they may also receive some positive evaluation for their fulfillment of the leader role (Eagly & Johannesen-Schmidt, 2001; Eagly and Karau, 1991).

Emotional Intelligence

Emotional intelligence (EI) is defined as an individual's ability to recognize and regulate emotions in self and in others (Goleman, 1995). It was Salovey and Mayer (1990), who brought emotional intelligence to the limelight. Since then EI has been modeled based on three theories: Salovey and Mayer (1990) framed it as a model of intelligence, Bar-On (1997) framed it as a model of well-being, and Goleman (1995) based his definition on the theory of performance. The ability model by Salovey and Mayer has four branches, ranked from the lowest to highest, namely: Emotional perception and expression, emotions' facilitation of thought, emotional understanding, and emotional management (Mayer & Salovey, 1997).

The mixed model propounded by Goleman (1995) has four domains: self-awareness, self-management, social awareness and relationship management. The difference between the two well-known models is that the mixed model includes personality traits like warmth, self-regard and persistence. The ability model on the other hand, separates the mental ability from such personality traits. Bar-On's (1997) model is essentially a scale, called EQ-i, which is a questionnaire used to measure emotional intelligence.

Emotional intelligence consists of four distinct dimensions (Wong & Law, 2002):

1. *Appraisal and expression of emotion in the self (self emotional appraisal [SEA]).* This relates to the individual's ability to understand their deep emotions and be able to express these emotions naturally. People who have great ability in this area will sense and acknowledge their emotions well before most people.

2. *Appraisal and recognition of emotion in others (others' emotional appraisal [OEA]).* This relates to peoples' ability to perceive and understand the emotions of those people around them. People who are high in this ability will be much more sensitive to the feelings and emotions of others as well as reading their minds.

3. *Regulation of emotion in the self (regulation of emotion [ROE]).* This relates to the ability of people to regulate their emotions, which will enable a more rapid recovery from psychological distress.

4. *Use of emotion to facilitate performance (use of emotion [UOE]).* This relates to the ability of individuals to make use of their emotions by directing them towards constructive activities and personal performance.

Emotional intelligence has several effects like flexible planning, creative thinking, mood redirected attention and motivating emotions (Brackett & Mayer, 2003). Studies have also shown that emotional intelligence is positively related to leadership (Mulla & Krishnan, 2008), job satisfaction (O'Hara, Thomas, & Tram, 2006), job performance and attitude (Wong & Law, 2002).

Modassir and Singh (2008) examined the relationship of emotional intelligence with transformational leadership and organizational citizenship behavior of the followers. Emotional intelligence was significantly positively correlated to conscientiousness, civic virtue, and altruistic behaviors of followers. The results indicated that emotional intelligence
of leaders enhanced the organizational citizenship behavior of followers, but was not significantly related to transformational leadership.

Barbuto Jr and Burbach (2006) studied elected public officials in the United States and direct-report staffers for each leader to explore the relationship between emotional intelligence and transformational leadership. The results showed that the emotional intelligence of the leaders shared significant variance with self-perceptions and rater-perceptions of transformational leadership. The results also somewhat supported the predictive value of emotional intelligence in antecedent leadership field research.

Mulla et al. (2008) argued that self-other agreement can help measure emotional intelligence more effectively than self-report measures. Two studies investigated the relationship between emotional intelligence and helping behaviors. The first study found that emotional intelligence was related to helping behaviors. In the second study, individual's and peer's ratings of emotional intelligence were collected. The difference between the individual's and peer's ratings of emotional intelligence was computed, and then each individual's difference score was compared to the mean difference score. The difference scores were used to place individuals into categories. Respondents were classified as over-estimators (who rate themselves higher than others do); under-estimators (who rate themselves lower than others do); in-agreement/good raters (who rate themselves favorably and similar to others' ratings); and in-agreement/poor raters (who rate themselves unfavorably and similar to others' ratings). Findings show that peer rated helping behaviors for under-estimators and in-agreement/good raters are higher than peer rated helping behaviors for over-estimators and in-agreement/poor raters.

**Gender Difference in Emotional Intelligence**

The roots of emotional intelligence seem to have stemmed from childhood. Maternal expressivity and the child's gender are associated with individual differences in expressivity and such differences remain stable over time (Scharfe, 2000). Mandell and Pherwani (2003) found a significant connection between emotional intelligence and gender. McClure (2000) showed that boys specialize in minimizing any emotions linked to vulnerability, guilt, fear and pain. Sanchez et al. (2008) found that women have higher emotional intelligence index than men do. Hence, we hypothesized:

**Hypothesis 1.** Emotional intelligence is positively related to femininity

**Transformational Leadership**

Burns (1978) defined leadership as a relationship that induces followers to pursue common or at least joint purposes that represent the values and motivations of both the leaders and the followers. Burns categorized the motive behind the leader and the follower as two types: transactional and transformational. Transactional leadership involves social exchange between the follower and leader. Transactional leaders offer rewards to followers for productivity and deny rewards if there is lack of productivity. Transformational leadership on the other hand, transcends self-interest and focuses on the good of the group. It is known to result in superior performance in organizations facing renewal and change. According to Burns (1978), transformational leadership “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (page 20), and results in a transforming effect on both leaders and followers. Transformational leaders thus serve as an independent force in changing the makeup of followers' motive base through gratifying their motives.

Bass (1985) extended Burns's (1978) concept to further explain that transformational leaders achieve performance beyond expectation by one of the following ways: (1) Creating awareness among the subordinates about the importance of the designated outcome. (2)
Influencing individuals to transcend their self-interest for the sake of the team. (3) Altering the subordinates' need levels on Maslow's hierarchy of needs. Bass explained that transformational leadership consists of four factors: (a) charisma or idealized influence, (b) inspirational leadership or motivation, (c) intellectual simulation, and (d) individualized consideration (Bass, 1985). Idealized influence was later subdivided into idealized influence attributed and idealized influence behavior. Bass (1998) also cited evidence from a range of studies conducted in various sectors like industrial, military, educational, healthcare, and voluntary organizations to support the validity of transformational leadership. Superior performance is possible only by the transforming followers' values, attitudes, and motives from a lower to a higher plane of arousal and maturity. Behling and McFillen (1996) identified six attributes of transformational leadership: Displaying empathy, dramatizing the mission, projecting self-assurance, enhancing the leader's image, assuring followers of their competency, providing followers with opportunities to experience success.

According to Burns (1978), “the result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents” (page 4). Transformational leaders throw themselves into a dynamic relationship with followers who will feel elevated by it and become more active themselves, thereby creating new cadres of leaders. Transformational leadership alters and elevates the motives, values, and goals of followers through the vital teaching role of leadership, enabling leaders and followers to be united in the pursuit of higher goals. Transformational leaders raise their followers up through levels of morality. The issue of moral leadership concerned Burns the most. He considered moral leadership as emerging from, and always returning to, the fundamental wants, needs, aspirations, and values of the followers. Satisfaction of followers' authentic needs is the primary objective of moral leadership. Burns held that transformational leadership “ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both leader and led, and thus it has a transforming effect on both” (page 20).

Studies have found significant and positive relationships between transformational leadership and the amount of effort followers are willing to exert, satisfaction with the leader, ratings of job performance, and perceived effectiveness (Bass, 1998). A study by Howell and Frost (1989) concluded that individuals working under a charismatic leader had higher task performance (in terms of the number of courses of action suggested and quality of performance), higher task satisfaction and lower role conflict and ambiguity in comparison to individuals working under considerate leaders or under structuring leaders. Leader's vision and vision implementation through task cues affects performance and many attitudes of subordinates (Kirkpatrick & Locke, 1996). Baum, Locke, and Kirkpatrick (1998) found additional support for this in their study. They concluded that vision and vision communication have positive effects upon organizational level performances. Strength of delivery of vision by the leader is an especially important determinant of perceptions of leader charisma and effectiveness (Awamleh & Gardner, 1999). Stewart (2006) did a meta-analysis of 93 studies and found that transformational leadership exhibited a consistently positive relationship with collective performance. Zhu, Chew, and Spangler (2005) found that human-capital-enhancing human resource management fully mediated the relationship between CEO transformational leadership and subjective assessment of organizational outcomes. Although transformational leadership is applicable to most organizational situations, the emergence and effectiveness of such leadership may be facilitated by some contexts and inhibited by others (Garg & Krishnan, 2003; Shamir & Howell, 1999).

Jung, Yammarino, and Lee (2009) examined the association of transformational leadership and leader effectiveness across two different cultures, the United States (U.S.) and Korea, with three followers' attitudes toward their leader (trust in the leader, loyalty, and value congruence) and followers' collectivistic orientation as moderators of this association. The results showed that followers' attitudes served as moderators of the transformational
leadership–effectiveness association only in the U.S. sample, while collectivistic orientation (conceptualized as a personal value, regardless of nationality) had a significant moderating effect in both samples.

Rafferty and Griffin (2006) drew a theoretical and empirical distinction between developmental leadership and supportive leadership, which are currently encompassed in a single sub-dimension of transformational leadership, namely individualized consideration. They found that developmental leadership displayed significantly stronger relationships with job satisfaction, career certainty, affective commitment to the organization, and role breadth self-efficacy than did supportive leadership. Pillai, Schriesheim, and Williams (1999) found that transformational leaders foster organizational commitment through the fairness of procedures they employ.

Piccolo and Colquitt (2006) found that transformational leadership was significantly positively related to perceived levels of the five core job characteristics (variety, identity, significance, autonomy, and feedback), which were related to intrinsic motivation and goal commitment. Intrinsic motivation was related to both task performance and organizational citizenship behavior (OCB). Keller (2006) studied transformational leadership, initiating structure, and selected substitutes for leadership as longitudinal predictors of performance. As hypothesized, transformational leadership predicted 1-year-later technical quality, schedule performance, and cost performance and 5-year-later profitability and speed to market. The substitutes of subordinate ability and an intrinsically satisfying task each predicted technical quality and profitability, and ability predicted speed to market.

Gooty, Gavin, Johnson, Frazier, and Snow (2009) developed and tested a conceptual model of followers' perceptions of transformational leadership as an antecedent to their positive psychological capital—a higher-order construct that represents an individual's motivational propensity and perseverance toward goals. Positive psychological capital, in turn, has in-role performance and organizational citizenship behavior as consequences. Structural equation modeling results support the relationship between followers' perceptions of transformational leadership and positive psychological capital, as well as the relationship between positive psychological capital and each performance outcome.

Avolio (2004) showed that transformational leadership positively predicted subordinate extra effort and performance beyond expectations, along with higher levels of commitment, cohesion, potency, identification, trust and satisfaction. Bono and Purvanova (2009) found that the extent of transformational leadership was stronger in virtual teams than in face-to-face teams. Gowen, Henagan and McFadden (2009) found that in the health care sector, transformational leadership and quality management improve knowledge management.

Bono and Judge (2004) did a meta-analysis of the relationship between personality and ratings of transformational and transactional leadership behaviors. Using the 5-factor model of personality as an organizing framework, they found that personality traits were related to 3 dimensions of transformational leadership—idealized influence, inspirational motivation (charisma), intellectual stimulation, and individualized consideration—and 3 dimensions of transactional leadership—contingent reward, management by exception-active, and passive leadership. Extraversion was the strongest and most consistent correlate of transformational leadership.

Jung and Sosik (2006) wanted to assess who charismatic leaders are, and how we differentiate charismatic from noncharismatic leaders. They collected multi-source field data in five technology-driven organizations to examine the relationship between five personal attributes of leaders (i.e., self-monitoring, self-actualization, motive to attain social power, self-enhancement, and openness to change), ratings of charismatic leadership, and follower (i.e., extra effort, self-actualization, collectivistic work motivation, organizational citizenship...
behavior) and managerial performance outcomes. Managers provided self-reports of their personal attributes and subordinates provided ratings of follower outcomes and their manager's charismatic leadership. Superiors of the managers provided ratings of the manager's charismatic leadership and managerial performance two months after collecting the managers' and subordinates' ratings. Results indicated that managers rated by subordinates as high on charismatic leadership reported higher levels of self-monitoring, self-actualization, motive to attain social power and self-enhancement values than managers rated low on charismatic leadership. Managers rated by superiors as high on charismatic leadership were associated with followers who reported higher levels of extra effort and organizational citizenship behaviors than managers rated low on charismatic leadership.

Gender and Transformational Leadership

Throughout history, many have come to believe that leadership is a traditionally masculine activity. Leadership is viewed as a male stereotype and agentic behavior is not seen as desirable in women (Eagly & Johannesen-Schmidt, 2001). Ely (1994) found that in male-dominated firms, the junior women perceived that being female was incompatible with power and status within the organization. Carbonnel (1984) showed that when a masculine task was given, women did not take up leadership role but when it was feminine in nature they took it up. In a study conducted by Russell, Rush, and Herd (1988) that examined women's behavioral expectations of effective male and female leaders, it was found that many similarities existed among the female participants in their views of effective leadership.

Druskat (1994) suggested that transformational leadership may be a more feminine style of leading, and is more likely to emerge in all-female organizations where women control the resources and so are less constrained in their leadership styles. Carless (1998) in her study involving bank managers found that females were rated higher on transformational leadership behaviors than males. Ross and Offermann (1997) found that transformational leadership relates positively to pragmatism, nurturance, and feminine attributes and negatively to criticalness and aggression. A meta-analysis by Eagly, Johannesen-Schmidt, and van Engen (2003) determined that women are more likely than men to inspire, mentor and creatively stimulate their followers while leading. They also reported that women demonstrated noticeably higher scores on all the subscales of transformational leadership and “contingent reward” subscale of transactional leadership as compared to men. A study conducted by Cavallo and Brienza (2004) also showed that supervisors rated females higher in adaptability and service orientation, and peers rated females higher on emotional self-awareness, conscientiousness, developing others, service-orientation, and communication. These actions have transformational qualities that help build cohesive organizations. Hence, we hypothesized:

Hypothesis 2. Leader’s femininity is positively related to transformational leadership.

Emotional Intelligence and Transformational Leadership

According to Goleman (1998), most effective leaders have a high degree of emotional intelligence. Zaccaro (1996) emphasized that skills such as flexibility, conflict management, persuasion and social reasoning become very important as leaders advance in the hierarchy.

Mandell and Pherwani (2003) found a significant positive relationship between transformational leadership style and emotional intelligence. George (2000) correlated the leader's ability to promote high quality relationships and thereby organizational effectiveness with emotional intelligence. Sosik and Megerian (1999) showed experimentally that managers who maintain self-awareness (self-other rating agreement) possess more aspects of emotional intelligence and these managers are also rated as being more effective by both superiors and
subordinates than those who are not self-aware. Another study by Barling, Slater and Kelloway (2000) found managers in a plant to show greater idealized influence, inspirational motivation and individualized consideration facets of transformational leadership with increased levels of emotional intelligence. Sivanathan and Fekken (2002) showed that leaders who reported higher levels of emotional intelligence were perceived by their followers to be high in transformational leadership and more effective. An analysis by Jayan (2006) showed that high managerial performers had significantly more emotional competence than the relatively low managerial performers.

Srivastava and Bharamanaikar (2004) examined the relationship of emotional intelligence with leadership effectiveness, success, and job satisfaction. The data were collected from Indian army officers using a structured interview schedule. Subordinates provided ratings of transformational leadership, which was taken as the measure of leadership effectiveness. The results showed that emotional intelligence significantly and positively correlated with transformational leadership and success, but not with job satisfaction. Emotional intelligence also differed across age but not across rank or length of service.

Duckett and Macfarlane (2003) examined the relationship between emotional intelligence and transformational leadership in the context of a UK-based retailing organization and examined whether a relationship exists between store manager performance and emotional intelligence profiles. The results showed a strong connection between emotional intelligence and transformational leadership; however, differences between the idealized and actual emotional intelligence scores were mainly located in transactional capabilities.

Since leadership is essentially a social interaction, the influence of the leader on the follower will depend entirely on the extent to which the leader is able to understand the true needs of the follower. Leaders understand and manage their emotions, display self-control, and realize the extent to which followers' expectations can be raised. Therefore, we hypothesized:

**Hypothesis 3.** Leader's emotional intelligence is positively related to transformational leadership.

A study conducted by Narimami, Taklavi and Siahpoosh (2009) showed that the mean score of leadership tendency and emotional intelligence among girl students were higher than that of boy students. This trend seems to extend to much later as well. Groves (2005) studied the relationship among leader gender, emotional skills and charismatic leadership and showed that female leaders scored higher on emotional skills and charismatic leadership. Therefore, we hypothesized:

**Hypothesis 4.** The relationship between transformational leadership and femininity is mediated by emotional intelligence.

**METHOD**

The participants included doctors and nurses belonging to two government multi-specialty hospitals and three private multi-specialty hospitals across South India, with not less than 100 doctors each. 110 matched responses were received, thereby creating 110 doctor-nurse dyads.

The doctor sample included 61 male and 49 female respondents, with a median age of 31 years, ranging from 21 to 70 years. The nurse sample included 7 male and 103 female respondents, with a median age of 30 years, ranging from 19 to 30 years. The duration of the relationship between the doctor and nurse ranged from 1 month to 5 years, with a median of 14 months.
Transformational leadership was measured by asking the nurses. Nurses working under the sampled doctors were asked to assess the transformational leadership of the doctor with whom they were associated. The scale used to measure transformational leadership was a slightly modified version of Transformational Leadership Questionnaire (TLQ) of Krishnan (2007). It comprises 30 items and is scored on a five-point Likert scale (1=not at all; 2=once in a while; 3=sometimes; 4=fairly often; 5=frequently, if not always). The questionnaire is included in the appendix.

The doctors answered self-evaluation of emotional intelligence and gender. We measured emotional intelligence using Wong & Law's (2002) 16-item EI questionnaire. The questionnaire is included in the appendix. Responses were recorded on a 5-point scale (0 = Not at all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; 4 = Frequently, if not always). The Bem's (1974) Sex Role Inventory (BSRI), the most widely used instrument for this purpose, was used for measuring gender. The BSRI helps us to classify individuals as masculine, feminine, androgynous (high on both feminine and masculine) and undifferentiated (low on both feminine and masculine). It has three scales comprising femininity, masculinity, and neutral items. Each scale has 20 items, yielding 60 items, in total. The inventory is included in the appendix. The doctors were asked to indicate on a 7-point scale how well each personality characteristic applied to them (1 = Never, or almost never true, to 7 = Always, or almost always true).

We did an analysis of variance of all the variables across male and female doctors. There was no significant difference between men and women on any of the variables. We also checked for the interaction between all pairs of variables and there was no significant interaction; the correlations between the variables were not significantly different across men and women.

**RESULTS**

The means, standard deviations, standardized Cronbach coefficient alphas and zero-order correlations are reported in Table 1.

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<td>1. Femininity</td>
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<td>2. Masculinity</td>
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<td>0.53**</td>
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<td>3. Emotional intelligence</td>
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<td>0.53***</td>
<td>0.63***</td>
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<td>4. Transformational leadership</td>
<td>2.99</td>
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<td>0.21†</td>
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Figures in parentheses are standardized Cronbach coefficient alphas; N=110.  
† = p < .10.  * = p < .05.  ** = p < .01.  *** = p < .001.

Femininity, emotional intelligence, and transformational leadership were all significantly positively correlated to each other, thus supporting Hypotheses 1-3. Masculinity was also significantly positively correlated to femininity and emotional intelligence.

To test for mediation, one should estimate the following three regression equations: first, regressing the mediator on the independent variable; second, regressing the dependent variable on the independent variable; and third, regressing the dependent variable on both the independent variable and on the mediator. To establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If
these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. Perfect mediation holds if the independent variable has no effect when the mediator is controlled.

Following these guidelines, first, we regressed emotional intelligence on femininity. The relationship was significant. Second, we regressed transformational leadership on femininity. This relationship was also significant. Finally, we regressed transformational leadership on both femininity and emotional intelligence. The relationship between emotional intelligence and transformational leadership was significant. Thus, all the three conditions of mediation held in the predicted direction. Moreover, the relationship between femininity and transformational leadership was not significant in the third equation. This implied perfect mediation since the independent variable (femininity) had no effect on the dependent variable (transformational leadership) when the mediator (emotional intelligence) was controlled. This provided support for Hypothesis 4. The regression results are shown in Table 2.

The four-field analysis (Bem, 1974) was then done. Individuals were assigned into gender-role categories based on the BSRI scores. Individual masculine and feminine scores were compared to the medians for the entire group. The BSRI masculinity median was 4.578947 while the BSRI femininity median was 4.7. People, who scored higher than the median on both the dimensions, were classified as androgynous (N=37). Similarly, people having only a high masculine score or only a high feminine score were classified as masculine (N=18) and feminine (N=12) respectively. Individuals scoring lesser than the median on both dimensions were designated undifferentiated (N=42). After the categorization, a 2 x 2 (masculine: low or high x feminine: low or high) analysis of variance of emotional intelligence and transformational leadership across the four-field categories were conducted. Results are presented in Table 3.

Table 2. Regression Analyses for Testing Mediation

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Parameter estimate</th>
<th>t Value</th>
<th>Model R²</th>
<th>Model F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Emotional intelligence</td>
<td>Femininity</td>
<td>0.33</td>
<td>6.45</td>
<td>0.28</td>
<td>41.61</td>
</tr>
<tr>
<td>2 Transformational leadership</td>
<td>Femininity</td>
<td>0.13</td>
<td>2.27</td>
<td>0.05</td>
<td>5.16</td>
</tr>
<tr>
<td>3 Transformational leadership</td>
<td>Femininity</td>
<td>0.04</td>
<td>0.69</td>
<td>0.10</td>
<td>i5.61</td>
</tr>
<tr>
<td>4 Emotional intelligence</td>
<td></td>
<td>0.24</td>
<td>2.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = p < .05. ** = p < .01. *** = p < .001.

Table 3. Analysis of Variance across Gender Categories

<table>
<thead>
<tr>
<th></th>
<th>Feminine</th>
<th>Masculine</th>
<th>N</th>
<th>EI</th>
<th>M</th>
<th>SD</th>
<th>TL</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Undifferentiated</td>
<td>Low</td>
<td>Low</td>
<td>42</td>
<td>2.55</td>
<td>0.39</td>
<td>2.87</td>
<td>0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Masculine</td>
<td>Low</td>
<td>High</td>
<td>18</td>
<td>3.16</td>
<td>0.27</td>
<td>3.01</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Feminine</td>
<td>High</td>
<td>Low</td>
<td>12</td>
<td>2.99</td>
<td>0.45</td>
<td>3.00</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Androgynous</td>
<td>High</td>
<td>High</td>
<td>37</td>
<td>3.30</td>
<td>0.37</td>
<td>3.13</td>
<td>0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculinity F</td>
<td></td>
<td></td>
<td></td>
<td>71.42</td>
<td>5.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Femininity F</td>
<td></td>
<td></td>
<td></td>
<td>11.42</td>
<td>1.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction F</td>
<td></td>
<td></td>
<td></td>
<td>3.18</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model F</td>
<td></td>
<td></td>
<td></td>
<td>28.67</td>
<td>12.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† = p < .10. * = p < .05. ** = p < .01. *** = p < .001.
There was a main effect of masculinity on emotional intelligence; androgynous and masculine doctors scored higher than the other two categories on emotional intelligence. Similarly, there was a main effect of femininity on emotional intelligence; androgynous and feminine doctors scored higher than the other two categories on emotional intelligence. There was also a main effect of masculinity on transformational leadership; androgynous and masculine doctors scored higher than the other two categories on transformational leadership.

We used regression analysis to test if the correlation between emotional intelligence and transformational leadership varied across the four gender categories. We did not find any significant difference. We also used regression analysis to test if femininity and masculinity interact with each other in affecting emotional intelligence. The product term in the model was not significant. Femininity and masculinity separately and independently affected emotional intelligence, but there was no interaction between the two.

We used structural equations modeling to test the goodness of fit of the following model: masculinity and femininity affect emotional intelligence, which in turn affects transformational leadership. The model that best fitted the data is given in Figure 1. Covariance structure analysis using maximum likelihood estimation yielded Goodness of Fit Index (GFI) of 0.9970, GFI Adjusted for Degrees of Freedom (AGFI) of 0.9852, and Root Mean Square Residual (RMR) of 0.0065 (Chi-Square = 0.6445; Chi-Square DF = 2; Pr > Chi-Square = 0.7245).

**Figure 1. Structural Equations Model**

The numbers mentioned above are standardized estimates in the manifest variable equations under maximum likelihood estimation (covariance structure analysis).

**DISCUSSION**

We studied 110 doctor-nurse dyads to investigate the relationship between transformational leadership and leader's gender and emotional intelligence. The study confirmed our hypothesis that leader's femininity is positively related to transformational leadership of doctors, the relationship being mediated by leader's emotional intelligence. These results are consistent with Cavallo and Brienza's (2002) results that leaders who had higher levels of femininity traits like compassion, warmth, sympathy etc. were perceived to be higher in transformational leadership by their followers.

Our study also shows that doctors high on emotional intelligence are better transformational leaders than those who are low on emotional intelligence. This finding is in line with what Goleman (1998) and Mandell and Pherwani (2003) had shown in their studies. Doctors and nurses usually operate in critical situations and in such cases, it is essential for the
doctors to make their supporting staff believe that they also have the power to influence the outcome of such situations, and also mitigate the negative effects of stress in such situations.

Another finding in this study was the positive relation between emotional intelligence and femininity. Mandell and Pherwani (2003) study on managers concluded that female managers in general have higher emotional intelligence than men. Our sector-specific study reiterates what several studies in other sectors have already confirmed. Doctors low on feminine traits will be unable to control their emotions, and as a result, will tend to ignore their staffs' views and their emotions. On the other hand, doctors high on femininity traits will have an open mind towards others' views and feelings.

Perhaps the most significant contribution of this study is demonstrating the mediating role of emotional intelligence on the relationship between femininity and transformational leadership. Earlier studies had shown that femininity enhances transformational leadership; however, this study goes beyond those findings and clarifies the process by which femininity enhances transformational leadership. Femininity has to necessarily first enhance emotional intelligence in order to thereby enhance transformational leadership. This implies that doctors' leadership qualities are enhanced by emotional intelligence, which in turn is enhanced by femininity.

An interesting finding is that femininity and masculinity are strongly positively correlated to each other, and both of them independently affect emotional intelligence. However, only femininity's effect on transformational leadership is mediated by emotional intelligence; there is no such mediation in the case of masculinity. Though both masculinity and femininity may help enhance emotional intelligence, only femininity would help enhance that part of emotional intelligence that can in turn enhance transformational leadership. This complex nature of gender effect may be because of the female-dominated healthcare sector from which data were collected.

Limitations and Suggestions for Future Research

Both emotional intelligence and gender scores were based on self-report by the doctors and hence the results could have been affected by same-source bias. Future studies could consider the possibility of collecting these two data at different times, considering that both these can be meaningfully measured only by asking the concerned person.

The respondents belonged to various specializations like general physicians, surgeons, specialists etc. and across both public and private hospitals. Emotional intelligence could vary widely across such segments of the sample; future studies could look at each sub-sample separately.

This study was done through a general survey of the respondents in large organizations. Data were collected at one time, and therefore causality could not be tested. Hence, future researchers could consider conducting an experiment or a longitudinal study, which might help explain causality.

Conclusion

This study sheds light on ways to transform individuals in the health care sector and thereby march towards improving our world. Since the health care sector is growing at a rapid rate, it is imperative to retain nurses, the largest workforce in hospitals, if we wish to make health care a sustainable business in action. This study has shown that high emotional intelligence and femininity traits are two ways that doctors can motivate and transform their nurses. Given the trend of high attrition rate among nurses, these hospitals can promote a better work culture and improved performance among nurses if doctors work on enhancing their own femininity traits and thereby their emotional intelligence.
APPENDIX
TRANSFORMATIONAL LEADERSHIP QUESTIONNAIRE (TLQ) ITEMS

Idealized Influence Attributed (Heroism)
1. Is hardworking and enthusiastic about work.
2. Is the epitome of confidence, whatever the situation.
3. Leads from the front.
4. Is charged with energy to do more.
5. Has the courage to take bold decisions and stick to them.
6. Works for the group's common goal, even at the cost of foregoing personal benefits.

Idealized Influence Behavior (Ideology)
1. Exhibits consistency in behavior when it comes to his/her set of core values.
2. Coordinates well with other doctors.
3. Leads by example, by practising what he/she preaches.
4. Is clear in his/her thoughts and actions.
5. Lives up to his/her commitments, no matter what.
6. Influences each person not to be selfish, but to think about the comfort of others.

Inspirational Motivation
1. Involves each member of his/her group in striving toward the group's common goal.
2. Shows others the bigger picture behind all actions.
3. Sets goals that enhance others' desire to achieve them.
4. Utilizes every opportunity to talk about the vision of the hospital.
5. Is persistent in achieving the targets.

Intellectual Stimulation
1. Encourages others to solve problems independently.
2. Makes others question the assumptions they make, for even the simplest of things.
3. Promotes free and radical thinking.
5. Makes others to come up with more and more ideas regarding any issue.
6. Encourages others to throw away conventional thinking.

Individualized Consideration
1. Recognizes the fact that different people need to be treated differently.
2. Recognizes competence in others and encourages them to build on the same.
3. Brings the best out of every individual.
4. Is sensitive to others' personal needs.
5. Encourages others to discuss personal issues with him/her.
6. Ensures that others get all possible support so that they can pursue other interests of life.
EMOTIONAL INTELLIGENCE (EI) QUESTIONNAIRE ITEMS
(WONG & LAW 2002)

Self-emotion appraisal (SEA)
1. I have a good sense of why I have certain feelings most of the time.
2. I have good understanding of my own emotions.
3. I really understand what I feel.
4. I always know whether or not I am happy.

Others' emotion appraisal (OEA)
1. I always know my friends' emotions from their behavior.
2. I am a good observer of others' emotions.
3. I am sensitive to the feelings and emotions of others.
4. I have good understanding of the emotions of people around me.

Use of emotion (UOE)
1. I always set goals for myself and then try my best to achieve them.
2. I always tell myself I am a competent person.
3. I am a self-motivated person.
4. I would always encourage myself to try my best.

Regulation of emotion (ROE)
1. I am able to control my temper and handle difficulties rationally.
2. I am quite capable of controlling my own emotions.
3. I can always calm down quickly when I am very angry.
4. I have good control of my own emotions.

BEM'S (1974) SEX ROLE INVENTORY ITEMS
1. Self-reliant
2. Yielding
3. Helpful
4. Defends own beliefs
5. Cheerful
6. Moody
7. Independent
8. Shy
9. Conscientious
10. Athletic
11. Affectionate
12. Theatrical
13. Assertive
14. Flatterable
15. Happy
16. Strong Personality
17. Loyal
18. Unpredictable
19. Forceful
20. Feminine
21. Reliable
22. Analytical
23. Sympathetic
24. Jealous
25. Has leadership qualities
26. Sensitive to the needs of others
27. Truthful
28. Willing to take risks
29. Understanding
30. Secretive
31. Makes decisions easily
32. Compassionate
33. Sincere
34. Self-sufficient
35. Eager to soothe hurt feelings
36. Conceited
37. Dominant
38. Soft-spoken
39. Likeable
40. Masculine
41. Warm
42. Solemn
43. Willing to take a stand
44. Tender
45. Friendly
46. Aggressive
47. Guileless
48. Inefficient
49. Acts as a leader
50. Childlike
51. Adaptable
52. Individualistic
53. Does not use harsh language
54. Unsystematic
55. Competitive
56. Loves children
57. Tactful
58. Ambitious
59. Gentle
60. Conventional
REFERENCES


