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CONTENTS

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EDITOR'S NOTE

I wish to welcome you to this edition of JIRSEA.

I am pleased to say that in this edition we have a good representation of papers from the Middle East. In itself this signifies an increasing awareness of Institutional Research (IR) matters in the geographical area, but hopefully also signifies the general expansion of the readership of JIRSEA.

It is also important to note that the scope of topics has also enlarged somewhat to include university-business partnerships and their impacts on various aspects of teaching and learning, as well as the relationships between sex-role characteristics and leadership behaviors of faculty members.

The proliferation of seminars, workshops and conferences on Teaching and Learning in the member countries of SEAAIR is also heartening as they too aim at improving the effectiveness of learning in higher education institutions in the region.

To be sure, much is still to be done to eliminate spoon-feeding for example, but those seminars, workshops and conferences have done much in terms of raising the awareness of better teaching and learning methods. The Malaysian Qualifications Agency (MQA) for example has clearly stated in its accreditation requirements that higher education institutions in Malaysia must use a variety of learning methods and that lectures must not be the only method used.

Indeed lectures are rapidly becoming anachronistic, for information transfer is now better facilitated through on-line means. Thus the nature of "lectures" must inevitably change and the MQA audit panels would now expect to observe scholarly exchanges and interactions between the lecturer and his/her students in the class or lecture rooms.

Somebody says, perhaps in jest that: *A lecture is the transfer of information from the lecturer to the students, without going through the brains of either*. The point is well made though.

For those who wish to contribute to JIRSEA please visit our website http://www.seaair.info . Also please note that the next SEAAIR Conference will be held on 4-7 November 2008 in Surabaya, Indonesia and hosted by STIE PERBANAS a higher education institution supported by major banks in the country. Further information is available on the Conference website http://seaair2008.com

Happy reading,

Nirwan Idrus
Editor

The relationships between sex-role characteristics and leadership behaviors of faculty members at the Hashemite University

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Abstract

The primary focus of this study was to determine the existence if any of the relationship between sex-role characteristics and the leadership behavior among faculty members at the Hashemite University in Jordan. The study involved 170 faculty members who self-rated their sex-role characteristics and their leadership behavior. Specifically, the study determined if a significant correlation existed between transformational leadership, transactional leadership total scores and sub-scores and femininity and masculinity scores.

The BEM Sex-Role Inventory – Short Form, and the Multifactor Leadership Questionnaire Form 6S (MLQ-6S) were used in this study.

The results showed that Transformational Leadership behavior was more dominant among faculty members at the Hashemite University than Transactional leadership behavior. Also, the results revealed that masculinity was more dominant than femininity among faculty members. No significant correlation existed between transformational, transactional leadership total scores, sub-scores, and femininity and masculinity scores of the faculty members. In the light of the research findings, some recommendations were made.

Key Words: Sex-Role Characteristics, Leadership Behavior, Faculty Members, Hashemite University, Higher Education in Jordan.

Introduction:

In studies examining higher education leadership, the academy is frequently characterized in literature as a "male culture" (Acquirr, 2000; and Joyner, 1998) where professional growth, status, and rank are based upon certain historically masculine cultural perceptions of competence, power, and success. Often depicted as an "ivory tower" buffered from and towering over the world outside, higher education, like other large, bureaucratic, political institutions, has been slow to change the pattern of males as the majority of those individuals achieving senior rankings, higher salaries, elevated prestige and greater leadership power.

Significant research efforts were undertaken to determine if sex-role characteristics differences existed in leadership behaviors (Cann & Siegfried, 1990; Caless, 1998; Eagly, Karau, & Makhijani, 1995; Posner & Brodsky, 1994). Because certain traits and behaviors were attributed to a particular gender, some leadership theories have been labeled as gender-specific (Eagly & Johnson, 1990). Transformational leadership, for instance, was a person-centered leadership behavior that endorsed empowerment and inclusiveness and was frequently referred to as a model associated with feminine leadership qualities (Eagly, Johannesen-Schmidt, & van Engen, 2003; Komives, 1991; Shamir, 1999). Alternately, transactional leadership was firmly articulate, methodical and goal-driven, but de-emphasized subjectivity; hence, it was considered a predominantly masculine leadership behavior (Eagly, Johannesen-Schmidt, & van Engen, 2003).

Throughout history, women were relegated to positions that were traditionally labeled as feminine, such as secretaries and teachers, and rarely given equitable representation in higher-ranking positions usually reserved for men (Gatenby & Humphries, 1999; van Engen, van der Leeden, & Willemsen, 2001). Rosener (1990) indicated that as women further entrenched themselves into the corporate world, they were forced into supportive-role positions that had relatively marginal administrative but were similar to roles they assumed at home.

For decades, educational researchers vigorously examined the possibility of whether there were gender differences in the way people lead (Butterfield & Grinnel, 1999). By investigating gender, the impact that leadership had on organizations allowed for a possible explanation of other social phenomenon such as why there was such a marginal representation of women in educational administration (Eagly, Karau, & Johnson, 1992). These differences could be of further consequences because "… they are one factor that may affect people's views about whether women should become leaders and advance to higher positions in organizational hierarchies" (Eagly & Johannesen-Schmidt, 2001, p. 781).

Cann and Siegfried (1990) contended that leadership behaviors were usually coupled with gender stereotypes. The feminine behavior of leadership was thought of as nurturing, interpersonal, inclusive, and tuned in to the needs and concerns of others. The masculine behavior of leadership, on the other hand, was more goal-and task-oriented, focused primarily on the needs of the organization, and deemphasized the subjective needs of the employee (Carbonell, 1984).

Broverman, Vogel, Broverman, Clarkson, and Rosenkratz (1972) supported the conclusions of Cann and Siegfried, noting that the general leadership behavior stereotypes of women were sensitive, warm, and tactful, whereas male stereotypes were identifiably assertive, rational, and component. Similarly, Collard (2001) highlighted the fact that women leaders tended to focus on stereotypically feminine attributes such as building relationships and collaborative efforts, whereas men were more stereotypically masculine in their leadership traits, by being bureaucratic and directive.

Parallel to the findings of Broverman et al., Klenke (1996) stated that masculine leadership behaviors were autocratic, task-oriented, and instrumental as opposed to feminine leadership behaviors that were interpersonal, inclusive and embraced collegiality. In their review of laboratory experiments that investigated leadership behaviors, Eagly, Johannesen-Schmidt, and van Engen (2003) found that the only expressed sex differences in leadership was that females tended to espouse a more democratic, participative leadership behavior, whereas men advocated a more autocratic and directive preference of leadership behavior.

Carli and Eagly (2001) noted that female leaders' likeability and perceived effectiveness could be augmented if they exhibited feelings of warmth and collaborative orientation. Other research on occupation and gender-role stereotyping indicated that women were more warm and expressive than men and that men were more competent and instrumental (task-oriented) than women (Deaux, 1984).

Van Engen et al. (2001) stated that, stereotypically, the leadership behaviors of women had a nurturing, interpersonal connotation as opposed to men whose leadership behaviors had a predominantly task-oriented tone that focused on the goals of the organization. "These behaviors relate to gender because of the stereotypes people have of men as instrumental, component, rational, and assertive and of women sensitive, warm, tactful, and expressive" (p. 582).

In Lips' (2001) study on how women envision themselves in positions of leadership, women rated images of themselves negatively when placed in positions of power and authority, particularly because of the difficulties encountered when trying to balance the gender-role expectations of femininity with authority. Similarly, a study on South African educational leaders showed that women administrators rated their leadership behaviors according to maternal attributes such as nurturance, empathy, team-building, and being supportive (Chisholm, 2001).

Carless (1998; van Engen, van der Leeden, and Willemsen, 2001) referred to transformational and transactional leaderships in gender-specific terms. Transformational leadership was viewed as feminine in nature because of the emphasis it placed on characteristics attributable to women, such as inclusiveness, intellectual stimulation, and valuing the self-worth of the employee. Transactional leadership was perceived as masculine because it was goal-driven, viewed people as tools towards completing objectives, and was disassociated with subjectivity (van Engen, van der Leeden, &

Willermsen, 2001). Consistent with these views on leadership, Rosener (1990, p. 120) noted: "The men are more likely than the women to describe themselves in ways that characterize what some management experts call transactional leadership. The men are more likely to use power that comes from their organizational position and formal authority. The women respondents, on the other hand, described themselves in ways that characterize transformational leadership-getting subordinates to transform their own self-interest into the interest of the group through concern for a broader goal. Moreover, they ascribe their power to personal characteristics like charisma, interpersonal skills, hard work, or personal contacts rather than to organization stature".

In Jordanian higher education institutions, females represented roughly 18% of professorships, 50% of the student population; nearly 51% of all bachelor's degree students and almost 50% of all graduate studies students. But, despite these significant strides in education, women represented only less than one quarter of the deans and department chairpersons of Jordanian colleges and universities (Ministry of Higher Education and Scientific Research, 2006).

Based on the above mentioned argument, the following remarks were observed: Research on the sex-role characteristics and leadership behaviors remains contradictory. However, research on the relationship between the sex-role characteristics and leadership behavior among faculty members and other variables is still worth conducting.

In reviewing the literature on this subject, the researcher found that no study has been done on Jordanian universities' faculty members. Therefore, there is a need for research on the sex-role characteristics and leadership behaviors among faculty members at the Hashemite University.

Aim of and Questions to be addressed in the Study

The primary focus of this study was to determine if a relationship existed between sex-role characteristics and leadership behavior among faculty members at the Hashemite University. This could be done through answering the following questions:

- Is there any dominant leadership behavior among faculty members at the Hashemite University?

- Are there any sex-role characteristics among faculty members at the Hashemite University more dominant than others?

- Is there a relationship between certain leadership behaviors and sex-role characteristics among faculty members at the Hashemite University?

Specifically, the study attempted to determine if there is significant correlation between transformational leadership, transactional leadership, total scores and sub-scores and femininity and masculinity scores.

Statement of the Problem:

The ability to lead effectively, regardless of gender, is an essential quality in any organization including in educational administration. In an attempt to define the attributes of effective leadership practices, several theories noted that perceived effectiveness, or lack thereof, was dependent upon whether an individual's leadership behavior was congruent with sex-role characteristics (Dudley, Love, & Komives, 2000; Johnson, 1976; Kent & Moss, 1994; Korabik, 1990). As further noted by Eagly, Karau, and Johnson (1992), when subordinates perceived their leader as having a leadership role that was gender-incongruent, the ability to influence others and effectively organize tasks that was necessary to complete assignments was greatly compromised. For example, Lips (2001) noted that when female leaders appear to be overly assertive and competitive, their ability to influence others, particularly males, was minimized.

Significance of the Study:

This study was firmly grounded on the premise of improving leadership efficacy within higher education. Hence, this study was significant because as it appraised the potential impact of sex-role characteristics on leadership effectiveness, it also provided important insight into the nature of effective leadership practices as well as recommendations for effective leadership practices in higher education.

This study communally examined the interrelationship of two of the least understood sociological concepts: leadership, and sex-role. As a result, it not only provided data for further research of the two concepts but also further expanded the knowledge base about leadership styles and sex-role characteristics in higher education.

Operational Definitions:

The following definitions are used in this study:

- **Sex-Role characteristics**: refers to those characteristics of behaviors and attributes to which one is identified with and which are typically associated with one or the other gender as defined by Bem (1981). The two sex-role characteristics used in this study are masculine, and feminine.
- **Leadership behavior**: is "the ability to influence or motivate an individual or a group of individuals to work willingly toward a given goal or objective under a specific set of circumstances" (Tucker, 1984, p. 41).

Methodology of the Study:

Participants:

The participants involved in the data collection process for this study were 170 faculty members at the Hashemite University in Jordan. Of the 145 valid responses, 108 were from male respondents (75%) and 37 (25%) were female. They self-rated their sex-role characteristics and their leadership behavior.

Instrumentation:

Bem Sex-Role Inventory – Short Form:

A sex-role characteristic for each participant was determined from responses to the Bem Sex-Role Inventory, Short Form (BSRI), developed by Sandra Bem in 1981 as a measure of psychology androgyny. A self-reported instrument, it can be administered to individuals as well as to large groups.

In 1974, Bem theorized that masculinity and femininity were conceptually and empirically distinct constructs and developed both a masculine and a feminine scale based on culturally desirable traits for men and women, respectively (Bem, 1974, 1981). The original BSRI contains 60 items; shortly after constructing the original version, however, Bem developed a short form comprised of the first 30 items to maximize internal consistency of the feminine and masculine scales, and for convenience in scoring (Bem, 1981). The short BSRI is considered to be more psychometrically sound than the original version (Hoffman, 2001).

The BSRI (Bem, 1981) is based on "a theory about both the cognitive processing and the motivational dynamics of sex-typed and androgynous individuals" (p. 10). According to Bem (1974, 1981) certain individuals are highly attuned to cultural definitions of sex-appropriate behavior, and use such definitions as bases upon which to evaluate their own behavior. Such individuals are motivated to maintain their behaviors to be consistent with a culturally idealized image of masculinity or femininity. Items for the Inventory, therefore, were selected based on cultural definitions of sex-typed social desirability of behaviors and not upon differential endorsements by males or females. Along with male and female associates, Bem developed the Inventory. Acting as judges, Bem (1981) and associates labeled a characteristic as feminine if it was judged more socially desirable for a woman than a man; likewise, a characteristic was labeled masculine if it was judged more socially desirable for a man than a woman.

The Short BSRI consists of 30 adjectives and phrases with 10 stereotypically feminine items, 10 stereotypically masculine items, and 10-filler items. Filler items are noted as characteristics that any individual could possess regardless of gender.

Respondents are asked to indicate how well each of the characteristics describes itself according to a seven choice Likert Scale. Response choices are: 1 Never or almost never

true; 2 Usually not true; 3 Sometimes but infrequently true; 4 Occasionally true; 5 Often true; 6 Usually true; and 7 Always or almost always true.

The original Bem Sex-Role Inventory was standardized on two normative samples of Stanford University students in 1973 and again in 1978. The first sample consisted of 279 females and 444 males; the second sample included 340 females and 476 males (Bem, 1981). In order to estimate internal consistency of the BSRI, reliability coefficients were computed separately for females and males from both samples on the femininity, masculinity, and femininity-minus-masculinity difference scores. This yielded coefficient alphas ranging from .75 to .78 on the femininity scale, .86 to .87 on the masculinity scale, and .78 to .84 on the difference score for females and males in both samples (Bem, 1981).

Since this normative data was derived, subsequent tests on subjects of various ages, races, and psychological profiles have replicated the means, medians and standard deviations of the BSRI (Bem, 1981). A study at the University of Washington (Walkup & Abbott, 1978) indicated that the social desirability of the judgments upon which the BSRI are based are relatively stable across both time and geography.

In test-retest reliability measures, correlations ranged from high of (.94) for females on the masculinity scale to low (.76) for males on the femininity scale, indicating that the BSRI is a highly reliable instrument (Bem, 1974, 1981).

The Multifactor Leadership Questionnaire Form 6S (MLQ-6S):

This was the second survey instrument used to obtain data in order to measure leadership scores. The faculty members from each department were asked to complete the Multifactor Leadership Questionnaire (MLQ-6S) (Bass, & Aviolo, 1992). A 21-item version, the MLQ-6S has been available since 1992 (Northouse, 2004).

The instrument measures how often leaders perceive their leadership behaviors: (1) Idealized Influence, (2) Inspirational Motivation, (3) Intellectual Stimulation, (4) Individualized Consideration, (5) Contingent reward, (6) Management by exception, and (7) Laissez-Faire Leadership

The first four leadership behaviors were categorized under transformational leadership and the next two were categorized under transactional leadership. The remaining leadership behavior is Laissez Faire leadership. Because the current study only necessitated transformational and transactional leadership scores, the MLQ-6S was modified only to contain 19 descriptive statements that corresponded to those particular leadership styles only.

Idealized Influence assesses the degree to which the leader instills pride in others, displays power and confidence, makes personal sacrifice or champions new possibilities, considers the ethical or moral consequences of decisions, and talks about the importance of having a collective sense of mission.

Inspirational Motivation assesses the leader's ability to articulate a compelling vision of the future as well as the degree to which he or she sets challenging standards and takes a stand on controversial issues.

Intellectual Stimulation is the leader's vision and those behaviors that increase followers understanding of the problems they face. Transformational leaders use intellectual stimulation to point out the problems in the current situations and contrast them with their vision of the future.

Individualized Consideration is the extent to which leaders treat followers as individuals and how much of a mentoring or coaching orientation leaders have for followers

Contingent Reward is the extent to which leaders set goals, make rewards contingent on performance, obtain necessary resources, and provide rewards when performance goals have been met.

Management-by-exception is the degree to which managers focus on negatives instead of positives, and the degree to which they intervene when mistakes occur. Active management-by-exception occurs when managers closely monitor follower performance and keep track of mistakes. Passive management-by-exception occurs when managers are unaware of performance problems until brought to their attention. Management-by-exception is characterized by negative feedback and punishment.

Laissez-Faire Leadership is neither transactional nor transformational. Leaders who avoid responsibilities, fail to make decisions, are absent when needed, or fail to follow up on requests would receive higher scores on the laissez-faire leadership factor.

Data Analysis:

Using SPSS version 11 for Windows, several steps were involved in analyzing the data provided by the participants. The first step involved scoring the BSRI to attain femininity and masculinity scores. This was done by summing the ratings for each scale and dividing by the number of items rated, in this case 10, to attain a raw score.

The next step involved the scoring of the MLQ-6S to attain sub-scores and a total score for transformational and transactional leadership. Sub-scores were derived by summing the items for each scale and dividing by the number of items that make up each scale. Total scores were attained by adding the sub-scores of each scale.

Results of the study

Question One: Is there any dominant leadership behavior among faculty members at the Hashemite University??

The mean score for total Transformational Leadership scores was 3.07 (SD, 0.24). The mean score for total Transactional Leadership scores was 1.83 (SD, 0.38). Table 1 illustrates these data. Four categories comprised the scales that measured transformational leadership; the mean score for Idealized Influence was 3.32 (SD, 0.37); the mean score for Inspirational Motivation was 3.64 (SD, 0.39); the mean score for Intellectual Stimulation was 2.54 (SD, 0.46); the mean score for Individualized Consideration was 2.75 (SD, 0.31). Two categories comprised the scales that measured transactional leadership; the mean score for Contingent Reward was 1.74 (SD, 0.46); the mean score for Management by Exception was 1.93 (SD, 0.51).

The result in Table 1 shows that Transformational Leadership behavior was dominant among faculty members than Transactional leadership behavior.

Table 1: Means and Standard Deviation on Transformational and Transactional Leadership sub-scores

Leadership Category	**Means**	**SD**
Idealized Influence	3.32	.37
Inspirational Motivation	3.64	.39
Intellectual Stimulation	2.54	.46
Individualized Consideration	2.75	.31
Transformational Leadership Total Score (TFL)	**3.07**	**.24**
Contingent Reward	1.74	.46
Management By Exception	1.93	.51
Transactional Leadership Total Score (TAL)	**1.83**	**.38**

Question Two: Are there any sex-role characteristics among faculty members at the Hashemite University more dominant than others?

The survey required the participants to self-rate their sex-role characteristics scores using to 30 indicators. Ten items were designed to assess masculinity and 10 items were designed to assess femininity. The remaining 10 items were filter items.

The mean score for femininity scores was 3.55 (SD, 0.31). The mean score for masculinity scores was 3.87 (SD, 0.42). The results show that masculinity was more dominant than femininity among faculty members. These data are illustrated in Table 2.

Table 2: Means and Standard Deviation on Femininity and Masculinity Scores

Personality Category	Means	SD
Femininity Score	3.55	.31
Masculinity Score	3.87	.42

<u>Question Three</u>: Is there a relationship between certain leadership behaviors and sex-role characteristics among faculty members at the Hashemite University?

<u>Table 3: Pearson Correlation analysis between leadership behavior (Transformational Leadership, Transactional Leadership), and sex-role characteristics (Femininity and Masculinity scores)</u>

		Femininity Score	Masculinity score
Transformational Leadership Total Score	Pearson Correlation Sig. level	(.079) (.145)	(.155) (.062)
Idealized Influence	Pearson Correlation Sig. level	(.039) (.171)	(.013) (.116)
Inspirational Motivation	Pearson Correlation Sig. level	(.179) (.116)	(.131) (.116)
Intellectual Stimulation	Pearson Correlation Sig. level	(.114) (.171)	(-.116) (.165)
Individualized Consideration	Pearson Correlation Sig. level	(.048) (.924)	(.019) (.822)
Transactional Leadership Total Score	Pearson Correlation Sig. level	(.147) (.639)	(.141) (.265)
Contingent Reward	Pearson Correlation Sig. level	(.166) (.460)	(.107) (.066)
Management by Exception	Pearson Correlation Sig. level	(.047) (.064)	(.001) (.998)

Table 3 indicates that no significant correlation exists between transformational, transactional leadership total scores, sub-scores, and femininity and masculinity scores of faculty members.

In the total Transformational Leadership scores and the four sub-scores on the MLQ-6S that assessed transformational leadership and the sex-role characteristics scores on the BSRI that assessed femininity and masculinity scores, five correlation coefficients with an alpha level of 0.05 were computed. To control for type I error across the five correlations, the Bonferroni Correction with a p value of less than .01 (.05/5=.01) was required for significance.

The results of the correlation analysis between femininity scores and the total Transformational Leadership scores (r(143) = .079, p = .145); femininity scores and Individualized Influence sub-scores (r(143) = -.039, p = .171); femininity scores and Inspirational Motivation sub-scores (r(143) = .179, p = .116); femininity scores and Intellectual Stimulations sub-scores (r(143) =.114, p = .171); and femininity scores and Individualized Consideration sub-scores (r(143) = .048, p = .924) were not statistically significant.

The results of the correlation analysis between masculinity scores and the total Transformational Leadership scores (r(143) = .155, p = .062); masculinity scores and Individualized Influence sub-scores (r(143) =.013, p = .116); masculinity scores and Inspirational Motivation sub-scores (r(143) = .131, p = .116); masculinity scores and Intellectual Stimulations sub-scores (r(143) = -.116, p = .165); and masculinity scores and Individualized Consideration sub-scores (r(143) = .019, p = .822) were resulted no statistical significance.

In the total Transactional Leadership scores and the two sub-scores on the MLQ-6S that assessed transactional leadership and the sex-role characteristics scores on the BSRI that assessed femininity and masculinity scores, three correlation coefficients with an alpha level of 00.05 were computed. To control for type I error across the three correlations, the Bonferroni Correction with a p value of less than .016 (.05/3 = .016) was required for significance.

The results of the correlation analysis between femininity scores and the total **Transactional Leadership** scores (r(143) = .147, p = .639); femininity scores and Contingent Reward sub-scores (r(143) =.166, p = .460); femininity scores and Management by Exception sub-scores (r(143) = .047, p = .064); were not statistically significant.

The results of the correlation analysis between masculinity scores and the total **Transactional Leadership** scores (r(143) = .141, p = .265); masculinity scores and Contingent Reward sub-scores (r(143) =.107, p = .066); masculinity scores and Management by Exception sub-scores (r(143) = .001, p = .998); were resulted no statistical significance.

Discussions and Conclusions

Based on the findings of the study, the following conclusions were drawn:

There is a prevalence of males as faculty members. Faculty members who score high in transformational leadership do not necessarily score high in femininity. Faculty members who score high in transactional leadership do not necessarily score high in masculinity.

The correlation analysis of the sex-role characteristics scores and leadership total and sub-scores did not reveal any remarkable findings. In Question three, the results indicated that femininity and masculinity scores were not significantly related to transformational leadership total scores or any of the four sub-scores. Similarly, the results of Question 3 revealed that femininity and masculinity scores were not related to transactional total scores or any of the two sub-score.

In general, the findings suggested that faculty members who were self rated as predominantly feminine, tended not to be rated by themselves as having a predominantly transformational or a transactional leadership style. These findings were not in agreement with results of studies like those done by (Eagly, Johannesen-Schmidt, & van Engen, 2003; Komives, 1991; Shamir, 1999). Transformational leadership, for instance, was a person-centered leadership behavior that endorsed empowerment and inclusiveness and was frequently referred to as a model associated with feminine leadership qualities.

Likewise, the findings suggested that the faulty members who were self-rated as predominantly masculine, tended not to be rated by themselves as having a predominantly transformational or transactional leadership style. This result contradicted the results reached by (Eagly, Johannesen-Schmidt, & van Engen, 2003), whose studies revealed that transactional leadership was firmly articulate, methodical and goal-driven, but de-emphasized subjectivity; hence, it was considered a predominantly masculine leadership behavior.

Implications

In spite of the research findings that support sex-role characteristics as a practical method for measuring leadership effectiveness, the current study shows that given a generally representative sample of faculty members, sex-role characteristics are not always abound. Based on the results of the correlation analysis of leadership and the sex-role characteristics scale score profile developed in this study, a vast majority of the faculty members did not posses a sex-role leadership classification. A key implication of this to faculty members as well as other higher education leaders would be to make considerable efforts to become cognizant of their own sex-role identification profile. By doing so, administrators could identify the activity seek to develop the collaborative skills and attributes that necessitate a sex-role orientation.

Another implication of the results is that individuals considering administrative roles in higher education should complete a self-assessment to determine if their leadership style exists within their own personality and decide if these characteristics are compatible with their sex-role taxonomy. The review of the literature of this study revealed the relative importance of sex-role and the impact it could have on perceived effectiveness. However, among the participants in the study, sex-role did not prevail as a dominating leadership quality. Most of the leadership scores were not congruent with the sex-role scores, further defining the ongoing dilemma of how researchers can adequately measure sex-role characteristics.

Recommendations for future study

The current study was a microcosmic examination of sex-role characteristics within higher education because it only involved faculty members. A recommendation for future research should include seeking new sample populations to compare with sex-role and leadership. Researchers are encouraged to consider crossing professional lines and examining other administrative leaders across various levels of university organizations such as presidents, vice presidents, and deans, to further determine the impact of gender-congruency on leadership effectiveness.

The variables covered in this research did not account for all the variables in leadership. While much has been accomplished in the area of leadership effectiveness, a great deal remains to be done if studies on the current trends of leadership are to accommodate personal growth among all prospective and active leaders. A recommendation for future research would be to incorporate new measures that reflect leadership effectiveness other than sex-role characteristics. One cannot consider sex-role characteristics alone. New measures might include communication, job satisfaction, and participatory decision-making, the environmental and sociological influences of one's region, education, and maturity, as well as our gender differences, factors contributing to effective leader.

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APPENDICES

First: Multifactor Leadership Questionnaire-6S (MLQ-6S)

This questionnaire is to describe your leadership behavior as you perceive it. Please answer this questionnaire anonymously. Twenty-one descriptive statements are listed on the following pages. Judge how frequently each statement fits you. Use the following rating scale:

Not at all = 0
Once in a while = 1
Sometimes = 2
Fair often = 3
Frequently, if not always = 4

	Items	Not at all	Once in a while	Some times	Fair often	Frequently, if not always
1	I make others feel good to be around me.					
2	I express with a few simple words what we could and should do					
3	I enable others to think about old problems in new ways					
4	I help others develop themselves					
5	I tell others what to do if they want to be rewarded for their work					
6	I am satisfied when others meet agreed-upon standards					
7	Others have complete faith in me					
8	I provide appealing images about what we can do					
9	I provide others with new ways of looking at puzzling things					
10	I let others know how I think they are doing					
11	I provide recognition/ rewards when others reach their goals					
12	As long as things are working, I don not try to change anything					
13	Others are proud to be associated with me					
14	I help others find meaning in their work					
15	I get others to rethink ideas that they had never questioned before					
16	I give personal attention to others who seem rejected					
17	I call attention to what others can get for what they accomplish					
18	I tell others the standards they have to know to carry out their work					

Second: BEM SEX ROLE INVENTORY

Rate yourself on each item, on a scale from 1 (never or almost never true) to 7 (almost always true).

1. defends own beliefs	1	2	3	4	5	6	7
2. cheerful	1	2	3	4	5	6	7
3. moody	1	2	3	4	5	6	7
4. independent	1	2	3	4	5	6	7
5. conscientious	1	2	3	4	5	6	7
6. assertive	1	2	3	4	5	6	7
7. strong personality	1	2	3	4	5	6	7
8. forceful	1	2	3	4	5	6	7
9. reliable	1	2	3	4	5	6	7
10. sympathetic	1	2	3	4	5	6	7
11. jealous	1	2	3	4	5	6	7
12. leadership ability	1	2	3	4	5	6	7
13. sensitive to other’s needs	1	2	3	4	5	6	7
14. truthful	1	2	3	4	5	6	7
15. willing to take risks	1	2	3	4	5	6	7
16. understanding	1	2	3	4	5	6	7
17. secretive	1	2	3	4	5	6	7
18. compassionate	1	2	3	4	5	6	7
19. eager to soothe hurt feelings	1	2	3	4	5	6	7
20. conceited	1	2	3	4	5	6	7
21. dominant	1	2	3	4	5	6	7
22. warm	1	2	3	4	5	6	7
23. willing to take a stand	1	2	3	4	5	6	7
24. tender	1	2	3	4	5	6	7
25. aggressive	1	2	3	4	5	6	7
26. adaptable	1	2	3	4	5	6	7
27. loves children	1	2	3	4	5	6	7
28. tactful	1	2	3	4	5	6	7
29. gentle	1	2	3	4	5	6	7
30. conventional	1	2	3	4	5	6	7

Epilogue

It is a real pleasure to read and edit papers about some of the most important development in teaching and learning as we search for the most appropriate and relevant methodology.

In this edition we presented to you work being done in Jordan on various aspects of teaching and learning including the relationship between learning methods and creativity. In the globalized world that we are in today, it is inevitable that those who are most creative are the ones that will survive even if temporarily. It has been said in the past that the so called *first mover advantage* is no longer an assurance for continued survival.

Like Quality, Creativity will need to be continually improved and thus practiced.

The use of new technology is also underlined in the papers of this edition of JIRSEA. Technology in the broadest sense of the word, namely, *the application of scientific knowledge*. Hence the use of Fuzzy Logic for example in Institutional Research.

The global mobility of students and in many instances of their parents as well, was covered by the paper on international students in Australia. The myth of Asian-Americans are well known to institutional researchers and has been proven to be just that. Sharma and Chandra also presented survey results that point to a number of myths in regards to international students in Australia.

The many factors that academics and educational managers must address in order to do the best job in teaching and learning will continue to multiply as time go. The job of academics and educational managers are changing rapidly and more work will need to be done in order to anticipate the changes that lie ahead.

Nirwan Idrus