Leadership education: the impact of managerial level and gender on learning

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With growing competitiveness in the global marketplace, more corporations are conducting leadership training for managers and executives. Over one-third of the educational budget in Fortune 500 companies is spent on employees at the middle and upper levels[1], yet programme effectiveness has generally not been measured[2]. Often evaluations are flawed by their anecdotal nature and a focus on a single firm right at the end of training[3]. Few studies have investigated the training experiences of executives and managers[4]. The distinction between them is very important since they have different organizational roles.

There has also been limited investigation of gender differences despite the dramatic rise of women in managerial and executive roles. It is true that women are disproportionately represented in lower-level corporate jobs and may feel less comfortable in work and training settings because of their token status[5]. Nevertheless a growing number of women attain middle- and upper-level positions, making it imperative to understand the influence of gender on learning during leadership education.

The lack of research on gender and level in management education is due to a number of factors. Historically upper management has been a male domain, so gender has rarely been investigated[6]. In addition, data on leadership education has not widely been available possibly due to concerns that confidentiality can not be maintained. Except for work by Levinson[7], the psychological investigation of executives is rare; there may be a reluctance to evaluate their performance[2]. Also, academics tend to study students or lower status employees not experienced managers in work settings[8]. One exception[9] found that after leadership training men report more positive affective reactions than do women managers.
This article explores the impact of gender and level on the learning of mature managers from large private and public sector organizations who attended a one-week leadership seminar. In order to research the influence of such complex factors as level and gender, we also study the contributions of age and role on the receptivity of managers and executives to leadership training. These two factors are expected to impact differentially the learning of men and women executives and managers.

The effect of level and age on learning
Early academic and clinical studies implied that management level was negatively correlated with openness to learning. Rogers[10] found that learning is negatively related to management level; high status participants were generally less open to exploring new options than their lower-level colleagues, possibly because they felt it unnecessary in their organizational roles. Kolb[11] found the greater the age and accomplishment of people, the less their commitment to learning; being senior they may not have felt a need for new learning.

Recent research, however, conflicts with earlier studies, suggesting that age may have a positive effect on attitude towards learning, particularly about psychological aspects of management (e.g. stress, personality issues, early life experiences). Thus, the relationship between age and learning may depend on the topic of the educational programme. Researchers[12] report that as adults age they progress in their attention to the psychological implications of information. In fact, Rhodes[13] concluded that age is the strongest predictor of positive work attitudes and behaviours, which might lead to more learning.

Gender and role theory
Role theory helps in understanding the effect of gender on the functioning of professionals. Bakan[14] notes that gender differences can be divided into communal and agentic dimensions. Communal dimensions involve concern for others, while agentic behaviour involves a focus on independence. In work organizations men tend to seek and be viewed as agentic, whereas women are drawn to communal roles[15]. However, these attitudinal preferences and perceptions often change with maturation. Men at mid-life often become more concerned with others, mentoring at work and in the community. Women at mid-life tend to become more independent and assertive[16]. Beginning around 50, the genders exchange roles with both tending to become more androgynous[17].

These gender differences may affect work roles and have ramifications for leadership education. Older male executives may be more communal in their work roles, while younger male managers are more agentic. Fagenson[6] reports that women and men in upper management see themselves similarly with respect to masculine attributes. In order to advance within the power structure, older female executives tend to become more agentic, taking on a more male orientation[18]. At the same time, males become more communal, as shown in
the mentoring of younger people and sponsoring organizational developments[19]. Therefore the proscribed role for executives is definitionally more androgynous, for example, the executive can adopt the role of teacher[20], and typically women can fit more readily into such roles than into agentic managerial positions. In addition, communal male executives should be more responsive to leadership education focused on psychological issues, listening and collaborative work than younger, agentic male managers.

To further explore differences at this organizational level we turn to role conflict theory which suggests that men and women differ in their attitudes towards balancing the demands of work and family. Some authors[21] report that the maternal role requires more time and personal involvement than the paternal role. The demanding nature of women’s family roles makes them more likely to experience conflict, overload and negative consequences from family roles than men[22,23]. Similarly, despite the recent increase in dual career families, Kossek[24] found that young women are significantly more likely to be concerned with problems about child care arrangements and hold less favourable attitudes about jointly managing work and family than men. Valdez and Gutek[25] found that a larger proportion of managerial women are divorced, separated, childless or have fewer children than their male counterparts. These differences suggest that women executives may experience less role conflict and consequently should respond more positively to psychologically focused leadership education than younger, more conflicted female managers, who are also more likely to have young children.

**Hypotheses**

We believed that the age and gender relations noted in the work literature would carry over to learning from leadership education. It was expected that level and gender would affect learning in three ways:

H1: Executives will rate their learning more highly than managers. This is consistent with older executives having mentoring roles and age being the strongest predictor of positive work attitudes and behaviour.

H2: Female executives will rate their learning experiences more highly than younger female managers. The former have less role conflict due to work/family issues and greater openness to learning due to age, than the latter.

H3: Male executives would report more learning than male managers. Older male executives in communal roles will be more open to psychological leadership issues than younger men in agentic roles.

**Setting and design**

A total of 550 professionals from major private and public sector organizations participated in 14 one-week seminars – six for executives and eight for managers – sponsored by a national training institute. Organizations sent professionals with the expectation of their learning about psychological aspects
of leadership. Each participant prepared a brief case examining an unresolved work problem. Seminars had a consistent dynamic orientation and the same schedule, which included three training events: lectures, small groups and personal interviews. Lectures were held on leadership, stress, personality development and responsive management styles. Small groups collaboratively reviewed attendees’ cases. There was a one-hour interview for discussion of work and/or personal issues.

Method
A 44-item follow-up questionnaire was sent to participants three months after the seminar. Using a previously developed measure[9] attendees indicated on a five-point Likert scale how much they had learned about 20 topics including managing anxiety and organizations, how leadership is affected by adult development, age, unconscious dynamics and early life experience, and the importance of open-ended questions. Participants rated eight criteria including knowledge gained used at work, knowledge gained used in work/non-work family relations, expectations met and willingness to participate again. Attendees ranked their degree of liking, learning, participation, involvement and staff facilitation of the events: lecture, small group and interview. They also rated how much the three events built on each other.

Results
Of the 550 professionals who attended the seminars 89 per cent were male and 80 per cent of the leaders were male. Although there were few female participants or leaders, these ratios are similar to the proportion of men in upper management in the organizations represented at the seminar and of such organizations generally[26]. The resulting masculine environment was embedded in a larger context reflecting the gender relations of the participants’ work settings[27]. Of all 550 attendees, 65 per cent (359) answered the three month follow-up, a response rate consistent with most survey studies[28]. There were no significant response rate differences by gender.

Table I shows background characteristics of those who responded to the questionnaire. The 40 women, as compared to 319 men, were significantly more often located in human resources and the public sector and less often married. Women had fewer children than men and women managers were significantly younger than men managers. Women executives were the oldest group and least often married, consistent with published work[26].

Table II shows the results of 2 × 2 analyses of variance of level and gender for significant main and interaction effects. Of the 44 items, 17 had significant main effects and/or interactions, which is three times the number that could be attributed to chance. Specifically, there were ten significant main effects for level 8 of these favouring executives. Executives reported learning more than managers about managing anxiety at work, unconscious dynamics in organizations, effects of age on leadership, the use of open-ended questions and knowledge gained helped at work. Executives liked, participated in and felt staff facilitated the lectures to a greater degree than managers. Managers
learned more about early life experiences and would participate again, than executives. Overall, executives rated 34 of the 44 items higher than managers, which is statistically significant (p < 0.01) by the sign test[29]. In addition, there were seven significant main effects for gender – six favouring men – in keeping with previous research[9].

There were seven significant interactions of level with gender. Female executives were highest on learning about managing anxiety and organizations; the effects of age on leadership; how knowledge gained was used at work; would participate again; liked the lectures and felt the three events built on one another. Tukey’s[30] studentized range test (HSD) was performed on all interactions. The numbers highlighted in Table II indicate significant differences between groups. Women executives were significantly higher than women managers on managing anxiety and organizations; effects of age on leadership; knowledge gained used at work; would participate again and liked the lecture. Women executives had the highest reported learning of the four groups, on 25 of the 44 items, which is statistically significant ($\chi^2 = 10.80, p < 0.01$).

Although this study used non-experimental procedures and had unequal cells, the resulting gender proportions[26] and response ratios[28] are representative, the findings are well beyond chance levels and form clear, consistent patterns. The results should be viewed as exploratory – hopefully stimulating the changes discussed later, which should produce more refined research.

Discussion
Eight of the ten significant effects for level favoured executives – lending support to Hypothesis 1. Executives reported that they learned more than managers about psychological issues. Experienced executives, whose work roles call for mentoring and sponsoring organizational development, may have

<table>
<thead>
<tr>
<th>Gender, level</th>
<th>N</th>
<th>Years in organization</th>
<th>Percentage in human resources</th>
<th>Percentage in public sector</th>
<th>Age</th>
<th>Percentage married</th>
<th>Number of children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men, managers</td>
<td>218</td>
<td>12</td>
<td>10.1c</td>
<td>3.7c</td>
<td>41a</td>
<td>93d</td>
<td>2.2b</td>
</tr>
<tr>
<td>Men, executives</td>
<td>101</td>
<td>15</td>
<td>5.0c</td>
<td>4.0c</td>
<td>45</td>
<td>94d</td>
<td>2.4b</td>
</tr>
<tr>
<td>Women, managers</td>
<td>35</td>
<td>11</td>
<td>20.0c</td>
<td>40.0c</td>
<td>38a</td>
<td>70d</td>
<td>1.2b</td>
</tr>
<tr>
<td>Women, executives</td>
<td>5</td>
<td>17</td>
<td>40.0c</td>
<td>20.0c</td>
<td>50</td>
<td>40d</td>
<td>1.4b</td>
</tr>
</tbody>
</table>

Table I. Tests of significant differences of background characteristics by gender and level
<table>
<thead>
<tr>
<th>Variable</th>
<th>Manager (M)</th>
<th>Executive (E)</th>
<th>Female (F)</th>
<th>Male (B)</th>
<th>G×L interaction cells^a</th>
<th>G (F-E)</th>
<th>G (F-M)</th>
<th>L (M-E)</th>
<th>L (M-F)</th>
<th>L (E-F)</th>
<th>L (E-M)</th>
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<tr>
<td>Number</td>
<td>253</td>
<td>106</td>
<td>40</td>
<td>319</td>
<td>5</td>
<td>218</td>
<td>101</td>
<td>35</td>
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<td>Topics</td>
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<tr>
<td>Early life experiences</td>
<td>3.66</td>
<td>3.36**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Adult development</td>
<td>3.09</td>
<td>3.11*</td>
<td>3.10</td>
<td>3.44*</td>
<td></td>
<td>FE*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Manage anxiety</td>
<td>3.09</td>
<td>3.11*</td>
<td>3.10</td>
<td>3.44*</td>
<td></td>
<td>FE*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Manage organizations</td>
<td>3.34</td>
<td>3.48*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Unconscious dynamics in organizations</td>
<td>2.78</td>
<td>2.91**</td>
<td></td>
<td></td>
<td></td>
<td>FE*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Effects of age on leadership</td>
<td>3.68</td>
<td>3.89*</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Open-ended questions</td>
<td>3.68</td>
<td>3.89*</td>
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<tr>
<td>Knowledge gained used at work</td>
<td>3.33</td>
<td>3.36*</td>
<td></td>
<td></td>
<td></td>
<td>FE*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Knowledge gained used in work/non-work relations</td>
<td>2.72</td>
<td>3.43**</td>
<td></td>
<td></td>
<td></td>
<td>FE*</td>
<td></td>
<td></td>
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<tr>
<td>Expectations were met</td>
<td>3.82</td>
<td>4.07*</td>
<td></td>
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<tr>
<td>Would participate again</td>
<td>4.05</td>
<td>3.79**</td>
<td></td>
<td></td>
<td></td>
<td>FE*</td>
<td></td>
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<td>Events</td>
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<tr>
<td>Like lecture</td>
<td>3.79</td>
<td>3.95**</td>
<td></td>
<td></td>
<td></td>
<td>FE**</td>
<td>3.84</td>
<td>3.92</td>
<td>3.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learn in lecture</td>
<td>3.52</td>
<td>3.84*</td>
<td></td>
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<tr>
<td>Participate in lecture</td>
<td>2.31</td>
<td>2.62**</td>
<td></td>
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<tr>
<td>Staff facilitate lecture</td>
<td>3.79</td>
<td>3.90*</td>
<td></td>
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<tr>
<td>Participate in interview</td>
<td>4.05</td>
<td>4.21*</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Three events built on one another</td>
<td>3.82</td>
<td>3.73*</td>
<td></td>
<td></td>
<td></td>
<td>FE*</td>
<td>3.73</td>
<td>3.72</td>
<td>3.74</td>
<td></td>
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</tbody>
</table>

Notes:
Entries are the means for the statistical main effects or interactions
^aThe interactions provided are for female executives, male managers, male executives and female managers
* p ≤ 0.05
** p ≤ 0.01
been more affected by both the educational process and the psychological content of the seminar than were the younger managers. Research shows that there is a halo effect for senior employees regarding their general attitudes towards work. Because executives have obtained high status in their jobs they also tend to feel more favourable towards human relations programmes[31].

Although there were few women in the sample, the obtained interactions, where female executives were always highest, strongly support Hypothesis 2. The results suggest that women executives can be both psychologically and systems oriented, while younger women may have more role difficulty functioning in a male-oriented training situation parallel to the dynamics of their male-dominated work setting. The greater learning of women executives may be due to their experiencing less role conflict in coping with the work/family interface than their younger counterparts consistent with the findings of Valdez and Gutek[25]. As Ragins and Sundstrom[26] suggest, these probably were exceptional women who de-emphasized their femaleness in order to advance in a male-dominated world or assumed male organizational attitudes[18] and masculine attributes[6] as they became self-confident executives[32].

There is no support for Hypothesis 3. Although males were in different roles, there were no learning differences between executives and managers. The failure to display different learning in male professionals may be due to the similarity of age of male executives and managers, 45 and 41 respectively. As a group, the ages of male professionals were between the ages of female executives and female managers.

The findings have several implications for management education. While they may have the most to learn, one cannot assume that young professionals actually will learn the most about leadership. In this sample the oldest group reported learning the most. In this era of trimming corporate ranks it may be time to question assumptions about age in relation to learning abilities[12]. Older executives can grow in knowledge, mentor younger colleagues and sponsor new organizational developments. Experienced executives should be retained since they possess a wealth of organizational knowledge and are receptive to learning the very aspects of leadership that enhance the effectiveness of modern corporations.

A combination of level (executive/manager), social systems (majority/ minority gender group) and role (communal/agentic) leads to a more thorough understanding of the obtained differences. Older executives in communal roles are more open to learning about the psychological aspects of leadership than younger managers in agentic roles. Women executives who are generally more self-confident and in less role conflict are more open to learning than younger women managers.

Even though there are a small number of senior women in this study these numbers, nevertheless, reflect organizational realities. For example, as of today there is only one Fortune 500 company led by a woman.
As more women enter the upper ranks of organizations it is important that leadership education be adapted to reflect these changes. Female training staff produce positive affective reactions among female managers[9] and aid male members’ self-perceived learning[33]. Women’s learning could further be enhanced by including more female participants, so avoiding tokenism[5] and embedding the seminar in a characteristically male context[27].

Part of the corporate educational process has been the mentoring of younger managers by older executives. However, women are struggling because there are not enough mature women available to mentor younger women at work. Female executives have less time[34] and are in less powerful positions, than male mentors[26]. We think that male professionals can further the careers of female managers through organizationally sanctioned mentoring that is linked with leadership education programmes. Even with the limitation of cross-sex relations[35], mentoring can enhance the development of both younger women managers and mid-career men. This suggestion is in keeping with Gaskill and Sibley[36] who found that upper-level women were more likely to have mentors (mostly male) than middle-level women executives. Kaufman[37] also noted the importance of a mentor early in women’s careers, while Vertz[38] concluded that an effective mentor of female protégées must be sensitive to issues of role-overload, career interruptions and discrimination.

If leadership programmes are to be effective for managerial women it is important that they have female leaders and stimulate a “gender-balanced” learning environment. Programmes can include not only traditionally “male” activities such as golf but a range of social options. Leadership education can include topics relevant to female managers. Possible topics are managing career and family conflict and exhibiting professional competence and leadership in a work environment which had previously been largely male bastions. If fostering diversity, particularly at high levels, is to succeed, education programme designers need to create supportive learning environments which do not simply mirror the tokenism women currently encounter.

References


