Full Length Research Paper

Nurturing student leadership skills

Kristin B. Naituli¹, Gitile J. Naituli², Francis N. Wegulo³
¹Egerton University P.O. Box 536 Njoro, Kenya
²Multimedia University College P.O Box 15653 Nairobi Kenya.
³Egerton University, Kenya.

Corresponding Author: Kristin B. Naituli
email: knaituli@yahoo.com

Received: July 26, 2011
Accepted: August 28, 2011

Abstract
This paper reports an initiative designed to assess and enhance the leadership practices of 168 students in the Faculty of Agriculture, Egerton University. The students were randomly sampled to represent female and male as well as junior and senior students. The Student Leadership Practices Inventory - SLPI (Kouzes & Posner, 2006) was used to assess how frequently the sampled students engaged in 5 specific practices of exemplary student leadership. Comparisons were made on leadership practices adopted by male and female students on one hand, and junior and senior students on the other. It was observed that female students scored higher on leadership practices than their male counterparts. Moreover, fourth year students scored higher than third year students, and third year students higher than their second year colleagues. This suggests that there is a leadership development/progression ladder closely related to academic levels. Furthermore it was concluded that leadership development training has great potential in providing students with opportunities for self-reflection and actualization, which leads to increased self-awareness and promotes development of a personal leadership identity.

Keywords: Leadership, student leadership development, student development, student leadership practices inventory

JEL Classification: M19

INTRODUCTION
Research conducted in the western part of the world point out a clear correlation between leadership development and higher education (Astin & Astin, 2000; Boatman, 1999; Zimmerman-Oster & Burkhardt, 1999). This suggests that increased capabilities in leadership result from increased investment in higher levels of education. Leadership development has for some time been a priority area for building capacity in Africa (Malunga, 2006). In the case of the African continent, however, the connection between leadership and education is not abundantly clear. This trend is the result of limited and scarce empirical research on how to successfully develop leaders, especially students. The net result is that literature documenting this important subject in the continent’s development process is hard to come by.

Agriculture is the key sector in the Kenya economy whether measured by its contribution to the country’s GDP, or any other yardstick. Given this central position, the sector enjoys positive policy support. In recognition of this critical role, it has been a long term desire and objective of the Kenya Government to ensure increased agricultural productivity (Daily Nation, Sept 12th, 2006). It is in view of this that the Government’s Strategy of Revitalizing Agriculture (SRA) was formulated. SRA’s objective is “to provide a policy and institutional environment that is conducive to increasing agricultural productivity, promoting investments, and encouraging private sector involvement in agricultural enterprises and agribusiness” (KARI, 2006).

Whilst applauding the Kenya Governments’ multidimensional efforts in addressing the key issues related to agricultural productivity, it is clear that the subject of leadership in the agricultural sector remains neglected. A review of training curricula and modules used in a majority of traditional agricultural institutions in Kenya shows that they are governed by what has been referred to as “process-orientation” as opposed to a “result-based management”. This is an indication of a leadership problem. In spite of the recent introduction of Result Based Management by the government as a public policy [Daily Nation, July 28th, 2006] it has yet to follow up and fully implement this initiative with a workable strategy for seeing this transition through.

In recognition of the realization that a leadership deficiency exists, we designed a research-project directed towards the development of agricultural leadership, with potential impact at all levels of governance within the sector. Improved agricultural leadership will likely lead us closer to the
pronounced goal of an improved institutional environment conducive to increasing agricultural productivity, promoting investments and encouraging private sector involvement in agricultural enterprises and agribusiness. The study set out to assess, compare and enhance the leadership practices among our future leaders within the field of agriculture; i.e. students at the Faculty of Agriculture at Egerton University, Kenya. The paper is thus addressing the issue of leadership in agriculture directly.

If deficiencies exist at the traditional agricultural training institutions in terms of preparing future leaders, are universities doing any better? Apparently not, since evidence instead suggests that by the time they graduate, the students are barely sensitized nor prepared for the real challenges awaiting them outside the lecture-halls. The students generally come out from college strong in the academic disciplines, but with hardly any leadership skills. These young Kenyans are well equipped with skills and knowledge centered on their areas of study. An impressive GPA used to be all that was needed to land a decent job and start climbing the corporate management ladder.

Smith (2007) asserts that shifting demographics today place less emphasis on managers of process, but more emphasis on leaders of people. She further maintains that leaders who have been coached and in turn coach employees have more impact on hard results by virtue of their soft skills. The challenge for training institutions and especially universities is to look for ways and means to guide our students towards discovering these subtle change-mechanisms and social dynamics that take place when managers transform into leaders and successfully create direction, alignment and commitment among the individuals and teams they are working with. The higher education system in Kenya needs to provide opportunities to learn more about how to design and institutionalize programs that adequately train, sensitize and build well rounded individuals who, with communication-skills and emotional intelligence, will be able to galvanize, engage and mobilize a workforce to deliver ever higher value to customers, clients and stakeholders.

In addition, it is incumbent upon universities to realize that we live and operate in a globalized environment to the extent that our students should demonstrate a strong awareness and motivation to grapple with global issues and the challenges they present. Leadership at higher education levels should rise to the immense prevailing challenges and design learning programs and support the creation of a learning environment that foster the skills required to provide effective leadership in a turbulent environment where change is the only constant.

Through our interactions with students, we noted that on average students’ knowledge and understanding of the concept of leadership, what it means to be a leader at any level in an institution, and how to cultivate one’s own leadership skills was minimal. This observation is corroborated by comments and accusations of the Kenyan society stifling leadership skills among the youth by failing to mentor them (Kinyongu, 2007:4). In addition, the Kenyan media has tended to focus its reporting mainly on political leadership thus equating leadership with positions of wealth, authority, power and fame. This is confusing young people, to the extent that they lack role models, mentoring, and knowledge of what makes an individual a leader within one’s sphere of influence. Even more so they lack knowledge on how to nurture and develop their own leadership skills.

These concerns lead us to conclude that there is a real need to create more awareness and understanding around the concept of leadership, and to address student leadership development at both individual and corporate levels. These concerns became evident as we developed and moved on to execute the Student Leadership Development Project at Egerton University, Kenya.

Growing challenges in the agricultural sector and indeed all other sectors in Kenya and elsewhere in the continent require a re-examination of the type of education offered to our future leaders. Whereas they are well prepared for their management roles in their respective lines of specialization, Kenyan students receive minimal training or mentoring in leadership skills. Yet these students are expected to take on leadership roles in society as they enter the workforce and start climbing the ranks of employment. Universities, the producers of leaders, have an important mandate and role to play in shaping and molding self-motivated citizens as leaders, empowered as change agents who can be counted upon to positively impact their organizations, communities and beyond. These qualities require that the curriculum content of the training offered to our university students is restructured to incorporate leadership development. A pioneering phase would target the Faculty of Agriculture, but in the long term, this training should be offered across the multitude of degree-programs offered in all universities in Kenya.

Leadership development in Africa is a wanting area in terms of research with very few published research articles to document learning or experience gained. Hence, as we started developing the model for this project our overall objective was two-fold: to contribute towards the subject of leadership development in Kenya, and to significantly enhance the leadership skills of students in the Faculty of Agriculture. Our specific objectives however were: To examine students leadership practices as a means to identify major leadership strengths and development needs among the students; to compare and contrast leadership practices of male and female students; to compare and contrast leadership practices of junior students with those of senior students; to capture students feelings, and expressed opinions regarding the leadership awareness sensitization, leadership assessment, and the leadership development training they received, and; to observe how Kenyan students would relate to the student version of the Leadership Practices Inventory – Student LPI (Kouzes and Posner, 2006), and the Five Practices of Exemplary Leadership which constitutes the LPI framework.

**METHODOLOGY**

To assess leadership practices we used Kouzes’ and Posner’s Student Leadership Practices Inventory – SLPI (2004) a leadership assessment tool involving self- and observer forms, developed specifically for college students. The subjects of the study were 168 students randomly sampled from the Faculty of Agriculture’s lists of registered students in year-groups 2, 3 and 4. SLPI questionnaires assessing student’s use of five practices of exemplary leadership were administered to sampled students. Each subject student filled the self-survey assessing themselves and subsequently selected 6 observers among their peers. The 6 observers then anonymously rated their peers through 30 behavioral statements indicating how frequently the
student engaged in five specific leadership behaviors. “Drop-off boxes” were placed around campus for the observers to submit their ratings with full anonymity.

Based on the data we received through the returned self- and observer forms individual leadership profiles were compiled and printed for each student. During the leadership workshop held in November 2008, the subject students received personal feedback through their individual leadership profiles, and participated in a series of structured leadership development activities. The project culminated in a follow-up meeting in April 2009. Data addressing the leadership training project outcomes was collected through workshop assessment forms. During the follow-up meeting in April, a more comprehensive questionnaire, with both closed and open-ended questions, was administered on the subjects.

Each sampled student was invited to attend an information-meeting in September 2008. Of the 168 invited students, 118 came for participation at the meeting. The purpose of the meeting was three-fold. First we needed to meet the sampled students to explain the background, and the aims, goals and objectives of the project. Secondly we needed to motivate the students to participate whole-heartedly. The collection of data from observers is a delicate process which requires understanding of potential trust issues related to the anonymity of the observers as they rate their peers. If there is a slight doubt concerning observer anonymity the observers will not be 100 % genuine as they rate their peers. Instead they will tend to rate the leadership qualities of their peers higher than what may actually be their true observations.

Since it was the participating students sole responsibility to inform and motivate their observers not only to fill the observer forms and bring them to the drop-off boxes placed around campus, but also to fill them honestly without trying to flatter their friends with inflated observer ratings, we spent considerable time educating the students on how to motivate their observers to give sincere leadership ratings. Thirdly, and as a first step in the data-collection procedure, we needed the students to fill in and hand over the Self-version of the Student Leadership Practices Inventory (Kouzes & Posner, 2006) survey.

By mid November 2008 we had collected complete sets of self- and observer-forms for 86 of the subject students. The same 86 students were subsequently invited to the leadership development workshop on November 22th, 2008. At the end of the workshop a project evaluation form assessing the leadership development project and the workshop was administered to the participants. The data we collected on these forms captured the student feelings, views, ratings and opinions regarding the leadership training-program they had participated in.

The training
The leadership training workshop covered The Five Practices of exemplary leadership (Kouzes and Posner, 2006) that the students were being assessed and rated on. The students eagerly reviewed the personal feedback presented through the printout of their own personal leadership profiles. The Five Practices of exemplary leadership are “MODEL the way, INSPIRE a shared vision, CHALLENGE the process, ENABLE others to act, and ENCOURAGE the heart”. The profiles identified each participant’s individual leadership strengths and development needs. General and specific advice was presented regarding how to improve on a specific practice when scores were low. Leadership Essentials based on materials developed by the Center for Creative Leadership were used during the facilitation process; Visual Explorer, Development is Dynamic, The Learning Curve, Emotional Intelligence, and Developing Effective Feedback Skills.

During the workshop, we focused on demystifying the understanding of the concept of leadership; to make leadership a personal choice, and to show that leadership at any level is something we all need to aspire for. One of our goals was to inspire a yearning for personal leadership development in each participant. Our desire was to show the students that leadership development is closely linked to self-development; that it is a set of skills and behaviors that can be practiced and significantly improved on by anyone interested in and motivated to develop their leadership skills. The leadership training encouraged self-reflection which leads to higher levels of self-awareness and thus initiates the process of developing a personal leadership identity.

FINDINGS
Findings are presented based on each objective and key questions raised in this study.

Female students score higher than males
Our results show that the Kenyan students’ best, or highest rated leadership practice was Enable others to act with a mean score of 4.1 (on a scale from 1 to 5) and the students weakest leadership practice was Model the way with a mean score of 3.7.

[SEE CHART 1 IN THE APPENDIX]

When comparing the leadership practices of male (57) students with those of female students (29) the females seem to have a relatively higher overall score. There was a significant difference in the overall mean scores for different gender, at 5 % significance level, with females scoring higher than their male counterparts on all the five leadership practices.

[SEE CHART 2 IN THE APPENDIX]

Other studies have shown that in addition to confidence, task-orientation, competition, objectivity, decisiveness, and assertiveness, all of which were traditionally viewed as masculine attributes (Schein, 1975), effective leadership also requires strong interpersonal skills, concern for building cooperative, trusting relationships, and use of behaviors traditionally viewed as feminine (e.g. supporting, developing, empowering). These feminine values, skills and behaviors have always had relevance in leadership, but as conditions in work organizations change they have become much more important for leadership (Yukl, 2006).

Eagly and Johnson (1990) conducted a meta-analysis of the gender studies involving actual managers and found no gender differences in the use of task-oriented behavior or supportive behavior. However the study did find that participative leadership was used slightly more by women than by men. In a more recent meta-analysis it was concluded that women use slightly more transformational leadership behavior than men (Eagly, Johannesen-Schmidt, & Van Engen, 2003). An
emerging paradigm shift in leadership theory and philosophy towards relational reciprocal models (Burns, 1978, Komives, Lucas, & McMahon, 2007; Northouse, 2007; Rost, 1991) may thus provide some of the explanation needed for the findings on gender presented in this study.

In the comparison between the different year-groups the 4th years scored the highest followed by the 3rd years then lastly 2nd years.

[SEE CHART 3 IN THE APPENDIX]

The education and development of students as leaders has long served as a central purpose for institutions of higher learning (Astin & Astin, 2000; Zimmermann-Oster & Burkhardt, 1999). Additionally, research indicates that students can and do increase their leadership skills during the college years (Pascarella & Terenzini, 2005). Some of the variables that can predict various leadership outcomes from the college-experience would include: a) type of institution, b) amount of involvement while on campus, c) leadership training, and d) participation in discussions of socio-cultural issues etc (Astin, 1991). However, in the present study the results showed that these differences in the means of the overall scores between the different year groups were not statistically significant.

Observer scores higher than Self-scores

Lastly we analyzed the relationship between the self scores and the observer scores. The correlation coefficient was 0.358 with a p-value of 0.001 revealing a weak positive relationship between the self-scores and the observer-scores on the Student Leadership Practices Inventory. The relationship was also statistically significant at 5% significance level. The paired t-test was also utilized to test whether there was a significant difference in the means of the self and observer scores. The observer scores, interestingly, were relatively higher than the self scores. The t-calculated = 0.935, p-value = 0.353 showing that the difference in the means of self and observer scores is not statistically significant at 5% significance level. This means that the observers (the peers of the students who participated in the study) rated the students higher than the students rated themselves in terms of leadership practices. This phenomenon could have different explanations. The participating students may have felt uneasy about giving themselves high scores, or the observers may have inflated the ratings to “make their friends feel happy”. The high observer scores could also perhaps be attributed to observers not being fully motivated or not taking the assessment exercise very seriously and ticking away without reflecting much on the specific behavioral statements they were rating.

Students rating their leadership assessment and development experience

The Project Evaluation Forms provided us with rich data on students’ perceptions, feelings, views, and opinions regarding the entire leadership assessment and development experience. We asked 8 questions on the leadership training workshops overall performance: Level of satisfaction, helpfulness of materials, helpfulness of learning methods, if concepts were beneficial, if logistics were well planned, and if time were well managed. Respondents rated each statement on a scale from 1 to 5 where 1 = “not well” and 5 = “extremely well”. The mean score obtained was 4.3 which indicated that students expressed satisfaction with the workshops content and overall performance.

[SEE TABLE 1 IN THE APPENDIX]

The respondents were asked to indicate on a scale from 1 to 5 the extent to which ten different leadership outcomes were achieved. For example: “I can explain the five practices of exemplary leadership”, “I can craft a learning plan to enhance my development needs” and “I can enhance the leadership capacities of those around me” etc The mean score obtained was 4.15 which is an indication that students felt they had absorbed and understood most of the leadership essentials the workshop aspired to teach.

Students had the opportunity to express their opinions freely under “additional comments” on the project evaluation form. Here the training team received feedback requesting improved time-management, logistics, invite prominent leaders in society, extend the time of the workshop to two or three days, include more time for interaction and brainstorming, make it available to all students, have better sound-system, and more. Having taken note of all the opportunities for improvements, what stood out in the free comments were the students’ thanksgivings for the opportunity to participate. The following words and phrases are captured from the additional comments on the evaluation-forms: “fulfilling, highly appreciated, grateful, educative, motivating, inspiring, thanks a lot, I was touched, I was able to realize myself, want more, great challenge, of great importance, learning experience was enormous” etc.

These comments suggests that the leadership project at Egerton University served a great need. Students expressed the need to be given more opportunities to develop themselves on a deeper level. It was suggested by the participants that the project be extended to include not just a few sampled individuals, but to benefit all the students enrolled at the university.

Follow-up four months after the training

The impact assessment forms provided us with valuable information about the students’ immediate learning and also their feelings and reactions to the leadership project they had participated in. But we still did not know if there would be a lasting impact from the initiative. It became clear that more data was needed to test if a more permanent transformation had occurred as a result of the project. Four months after the workshop took place we therefore invited the participating students to attend a follow-up meeting. The purpose of the meeting was three-fold; first and foremost, from the researchers’ perspective, we needed to collect more data to see if the impact from the leadership development project would extend beyond short-term, or if a more permanent shift in terms of increased self awareness, development of a personal leadership identity and increased personal leadership initiative had occurred. Transformational Leadership involves personal transformation of the individual to a higher level of commitment and inspiration. This also involves changing attitudes and beliefs, and it entails unearthing and releasing stereotypes and mental models around leadership in particular and around what individuals may think makes someone a leader.

The second reason for gathering the students was to provide an opportunity for them to share their personal leadership testimonies and tell inspiring stories about their leadership
experiences and lessons they had learned during the months that passed since the training. Personal stories from peers that provide inspiration and leadership insights can be powerful tools for learning and transformation.

Lastly, we aspired to set up a communication platform where students could interact in writing and share information around the leadership essentials and principles introduced during the workshop, to form a supportive network of likeminded and ambitious young individuals. A personal invitation was sent by SMS to each workshop participant. 59 students came for the meeting and 58 completed the data-survey we had prepared.

What is leadership, and who can be a leader?
When asking about the students pre-workshop views of leadership and who can be leaders we found that students used to have quite rigid and negative views of what leadership entails and who could become a leader:

EXHIBIT 1: STUDENTS’ PRE-WORKSHOP VIEWS OF LEADERS AND LEADERSHIP

- I believed leadership were sort of hereditary hence if one is born in a family that previously had no leader then he or she could not be a leader
- Generally I believed leaders are people who are sometimes out to show off that they can outdo others.
- Leaders are people whose aim is to exploit their subjects.
- Leaders must be perfect in everything (they should never ever fail).
- A leader was anyone who was very aggressive.
- Leaders were supposed to be famous and bossy.
- I looked at leadership as inborn based on capitalism and dictatorship and not something to learn
- I thought that leadership was the ability to command and order people when carrying out duties.
- I used to view leadership as a gift from God. I thought people who have power in terms of richness are the ones who can become leaders.
- I thought a leader is somebody who is authoritative and in a position to force his subjects to work.
- Before the training I used to say that a leader should be courageous, authoritative, harsh and cruel in order to be effective.
- To me it was just meant for the married and elders in the society e.g. the village elders, chiefs etc.

The students were then asked if they felt that their pre-workshop attitudes, beliefs, stereotypes or mental models had been inhibiting their expression of leadership, development of leadership, or suppressing their leadership ambitions. 80 % felt that their expression of leadership had been inhibited by their previous attitudes, beliefs, stereotypes and mental models around the concept of leadership, 84 % felt their leadership development had been inhibited, while 74 % indicated that their leadership ambitions had previously been suppressed due to mental models and rigid mind-frames about what leadership is and who can engage in it.

EXHIBIT 2. INFLUENCE OF ATTITUDES, BELIEVES, STEREOTYPES, MENTAL MODELS ETC.

- Looking at our leaders today e.g. the MP’s I got the impression that most of them can be corrupt and there is no way we can challenge them, so I had a bad attitude against the leadership process in our country.
- I had negative attitude towards political leaders and hated them but now I know being a leader you can change others.
- I was afraid of standing up and being counted as a leader because I thought of leaders as being political.
- My attitudes which were inhibiting my expression of leadership included the belief that leaders are not always good people e.g. I had some sense of hatred on leaders.
- In suppressing ambitions of leadership I had an attitude that for one to be successful it should be in line with the cash one has, which is not true.
- I believed that men had more privilege in acquiring leadership positions than women and that firstborns had more of a right to leadership in their families.
- I was convinced that I was born a leader hence any opportunity of leadership that came along I volunteered. With this attitude I believed I was already fully developed as a leader. Now I know I can develop my leadership skills even further.
- I thought a young person could not be a leader.
- I thought leadership was all about positions but I later realized that one can be a leader even when he/she is not in a leadership position. It all depends with oneself and ones desire and willingness to learn how to lead.

On a scale from 1 to 5, we asked the students to rate their agreement with various statements concerning leadership. The statement: “I can enhance the leadership capacities of those around me” had a mean score of 3.91 out of 5 (78%). “Increased confidence in my own ability to succeed in life” obtained a mean score of 4.61 out of 5 (92%). “The leadership training I received has encouraged me to seek out more leadership challenges to further advance my leadership skills” scored a mean of 4.35 out of 5 (87%).

[CENTER TABLE 3 IN THE APPENDIX]

Cultural barriers to leadership

When asked about their feelings regarding barriers to active engagement in leadership 63% of the students felt that traditional views of age and gender, informed by cultural and religious norms, may be potential barriers to active engagement in leadership. 38% mentioned age as a barrier while 33% listed gender as a potential barrier.

[SEE TABLE 4 IN THE APPENDIX].

Other outcomes worth mentioning include, 81% of the student participants stating that their career ambitions had changed as a direct result of the training. 90% of the participants had employed one or more of the leadership practices taught, and 100% of the respondents stated that the leadership training had a direct impact on their self-awareness.

[SEE TABLE 5 IN THE APPENDIX]
CONCLUSION AND RECOMMENDATION
One observation coming out of this project is that the participating group of Kenyan students embraced the SLPI, and with it The Five Practices of exemplary leadership (Kouzes and Posner, 2006) without expressed reservations. The SLPI is generally presented as a leadership assessment tool, but when carefully administered it can also be a powerful tool for self-discovery, leading the student to become more self-aware and more self-referral. The feedback may trigger powerful inner responses and send the student on a journey of newfound self-discovery and as such trigger important self-development. Some of the personal comments we collected bear testimony to this. The same was true for the Leadership Essentials that were taught; the students expressed appreciation for these concepts’ meaningfulness and usefulness as tools for leadership development.

We therefore observe that the findings from analyzing the leadership data are worth taking note of. However, with only 86 respondents in our sample, few, if any solid conclusions can be drawn at this stage. It is concluded nevertheless that leadership development training has great potential in providing students with opportunities for self-reflection and actualization, which in turn can lead to increased self-awareness and the development of a personal leadership identity. Arising from these findings, it is recommended that students should be accorded more opportunities to enable them develop their leadership qualities, especially before they complete their college education.

Moreover, we suggest a follow-up study involving a considerably bigger group of students during which the 30 behavioral statements on the SLPI can be reviewed according to degree of perceived relevance in the local context, possible ambiguities, and culturally contingent interpretation. That would give us even more information regarding the instruments’ and this specific leadership framework’s validity, reliability and usefulness in the Kenyan context. This project and study was made possible through a research grant from Egerton University’s Division of Research and Extension, and through extensive logistical- and facilitation support from Center for Transformational Leadership and ERMIS Africa, Nakuru.

REFERENCES


Government of Kenya (2008), Annual Report


student leadership. NASPA Journal. 37(1), 325-336.


APPENDICES

CHARTS AND TABLES:

CHART 1. OVERALL MEAN SCORES FOR LEADERSHIP PRACTICES

CHART 2. LEADERSHIP PRACTICES ACCORDING TO GENDER

CHART 3. LEADERSHIP PRACTICES ACCORDING TO YEAR-GROUP
TABLE 1. STUDENT RATINGS OF LEADERSHIP TRAINING

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was satisfied with leadership workshop</td>
<td>3</td>
<td>5</td>
<td>4.52</td>
</tr>
<tr>
<td>Workshop materials were useful</td>
<td>3</td>
<td>5</td>
<td>4.47</td>
</tr>
<tr>
<td>The Learning methods used were helpful</td>
<td>3</td>
<td>5</td>
<td>4.39</td>
</tr>
<tr>
<td>Concepts discussed were beneficial</td>
<td>3</td>
<td>5</td>
<td>4.62</td>
</tr>
<tr>
<td>Workshop logistics were well planned</td>
<td>2</td>
<td>5</td>
<td>4.42</td>
</tr>
<tr>
<td>Tools/Activities used in workshop were helpful</td>
<td>2</td>
<td>5</td>
<td>4.40</td>
</tr>
<tr>
<td>Workshop program flow connected well</td>
<td>2</td>
<td>5</td>
<td>4.10</td>
</tr>
<tr>
<td>Time was managed well</td>
<td>1</td>
<td>5</td>
<td>3.46</td>
</tr>
<tr>
<td><strong>Overall mean rating on a scale from 1 to 5:</strong></td>
<td></td>
<td></td>
<td>4.30</td>
</tr>
</tbody>
</table>

TABLE 2. ATTITUDES, BELIEVES, STEREOTYPES & MENTAL MODELS

<table>
<thead>
<tr>
<th></th>
<th>Students responding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The influence of (PRE-workshop)</strong></td>
<td>YES</td>
</tr>
<tr>
<td>ATTITUDES, BELIEVES, STEREOTYPES and MENTAL MODELS about leadership:</td>
<td></td>
</tr>
<tr>
<td>• Inhibited my expression of leadership</td>
<td>80%</td>
</tr>
<tr>
<td>• Inhibited the development of leadership in me</td>
<td>84%</td>
</tr>
<tr>
<td>• Suppressed my leadership aspirations/ambitions</td>
<td>74%</td>
</tr>
</tbody>
</table>

TABLE 3. LEADERSHIP OUTCOMES I

<table>
<thead>
<tr>
<th></th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = not well  2 = fairly well  3 = well  4 = very well  5 = extremely well:</td>
<td>From 1 to 5</td>
</tr>
<tr>
<td>• I can enhance the leadership capacities of those around me</td>
<td>3.91</td>
</tr>
<tr>
<td>• I have more confidence in my own ability to succeed in life</td>
<td>4.61</td>
</tr>
<tr>
<td>• The leadership training I received has encouraged me to seek out more leadership challenges to further advance my leadership skills</td>
<td>4.35</td>
</tr>
</tbody>
</table>

TABLE 4. PERCEIVED BARRIERS TO LEADERSHIP

<table>
<thead>
<tr>
<th></th>
<th>Students responding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>“Do you feel that traditional views of age and gender, informed by cultural or religious norms, may be potential barriers to active engagement in leadership for you?”</strong></td>
<td>63%</td>
</tr>
<tr>
<td>[22 of 58 respondents ticked “age” as barrier, 19 ticked “gender” as a barrier]</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 5. LEADERSHIP OUTCOMES II

<table>
<thead>
<tr>
<th></th>
<th>Students responding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Has your career ambitions changed in any way as a result of the leadership training?</strong></td>
<td>81%</td>
</tr>
<tr>
<td><strong>Have you used the five leadership practices and/or the other leadership concepts since the workshop?</strong></td>
<td>90%</td>
</tr>
<tr>
<td><strong>Did the leadership training have an impact on your self-awareness, how you see yourself?</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>