

### BACKGROUND

Despite research demonstrating that female leadership is valued and desired,<sup>1</sup> barriers to leadership development for women in academic medicine and science settings persist, and many women feel excluded from leadership.<sup>2-4</sup> As part of a study evaluating a new leadership development program (LDP) at Georgia Regents University for clinical and administrative management professionals with challenging accountabilities and mandates, we were interested in measuring the effectiveness of this program for female participants, as well as describing the characteristics associated with their growth in five leadership capabilities that were targeted by the program: innovativeness, problem-solving, leadership self-efficacy, strategic thinking, and authentic leadership.

### METHODS

The IRB-approved data collection for this study occurred over the course of two cohorts (2013-14 and 2014-15;  $n=47$ ) of an eight-month longitudinal LDP with a broad curriculum (e.g., self-awareness, strategy and mission, team-building). Data collected included pre- and post-course self-assessment of the five leadership capabilities mentioned above, as well as demographic information and leadership experiences. Data from female participants ( $n=21$ ) were extracted from the

original data set and analyzed for this pilot study. To measure the overall efficacy of the program, paired samples  $t$ -tests were conducted on all five of the leadership capabilities. To identify characteristics associated with growth in the five leadership capabilities, standardized overall total change scores (based on the five leadership capabilities) were calculated for all participants, and participants were placed in one of three groups: top, middle, or bottom third. Using group membership as the independent variable, a series of ANOVAs were calculated to identify any differences based on demographic factors, leadership experiences, or any of the five leadership capabilities. In addition, several paired samples  $t$ -tests were conducted within each group.



### OVERALL OUTCOMES

The female sample was 91% white, with a mean age of 49.9. The mean age of obtaining a leadership position was 44.5, and the mean years of being in a leadership position was 5.4. For the overall group, there was significant improvement in leadership self-efficacy, strategic thinking, and authentic leadership. At the group level, there was significant improvement in standardized overall total change scores for all three groups; however, those with a doctorate degree, an academic position, or both were found to have significantly higher scores than those with other degrees or positions. There were no statistically significant differences between the groups based on any demographic factors or leadership experiences. The top third group was characterized by having significantly higher pre-course scores in innovation, leadership self-efficacy, strategic thinking, and authentic leadership, as well as significant pre-post course improvement in these same leadership capabilities. By contrast, the middle and bottom third groups were characterized by having less significantly elevated pre-course scores and pre-post course improvement. Based on these initial pilot data, there is preliminary evidence of the need for tailored LDPs for women, and plans are underway to collect additional data in new cohorts to develop customizable LDPs for a broad spectrum of women in leadership.

### KEY FINDINGS

- Mean age for obtaining a leadership position = 44.5.
- Across all women, there was significant improvement in leadership self-efficacy, strategic thinking, and authentic leadership.
- Women with a doctorate degree, an academic position, or both had significantly higher standardized change scores than those with other degrees or positions.
- Demographic factors and/or leadership experience were not significant factors in standardized change scores.
- Women who experienced the greatest amount of change had higher pre- and post-course scores in innovation, leadership self-efficacy, strategic thinking, and authentic leadership.
- These pilot data suggest the need for customized LDPs for women.



### REFERENCES

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