

Full Length Research Paper

To Know I Can Might Be Enough: Women's Self-Efficacy and Their Identified Leadership Values

Kyle M. Momsen and Julie A. Carlson

Kyle M. Momsen: Department of Health and Exercise Science, Gustavus Adolphus College
Email: kmomsen@gustavus.edu; Phone 507-933-6062

Julie A. Carlson: Department of Educational Leadership, Minnesota State University, Mankato
Email: Julie.Carlson@mnsu.edu; Phone: 507-389-5441

Accepted July 28, 2013

This three-year mixed-method study examined levels of self-efficacy and leadership values held for 32 women before and after participating in graduate coursework specifically focused on women's leadership issues. A 21-item, 5-dimension self-efficacy scale adapted for leadership from the work of Albert Bandura was used in addition to open-ended questions focused on leadership values and obstacles. Self-efficacy levels increased in each dimension, most notably in Encouraging a Productive Work Ethic and Creating a Positive Work Climate. Shifts occurred in the nature of values identified for effective leadership in terms of more traditional and outwardly-visible attributes to more postmodern and inwardly-experienced attributes. The nature of obstacles that participants identified as preventing them from being more effective leaders also revealed shifts from self-critical behaviors to proactive behaviors.

Keywords: self-efficacy, leadership values, women's leadership self-efficacy

Background

Renowned cognitive social psychologist, Albert Bandura (1997; 2004), theorized that people primarily learn by observing and replicating the behavior of others. Learning is largely a social activity, he posited, meaning socially influenced and socially facilitated. One cognate area within cognitive social psychology, *self-efficacy*, pertains to people's perceptions of their own capabilities. Self-efficacy is often socially sculpted through the tendency of comparing, sub-consciously or not, one's own performance to that of others.

Over time, Bandura (1977; 1997; 2004; 2006) established correlations between levels of self-efficacy and actual performance. Numerous self-efficacy measurement scales constructed by Bandura and others have laid the groundwork for a remarkable body of research conducted across disciplines over the past four decades. Bandura's assertion has been that people tend to perform at higher levels when their perceived self-efficacy is high, and likewise, tend to perform at lower levels when their self-efficacy is low. Hence, this phenomenon of self-efficacy is paramount to understanding leader and leadership effectiveness. Such insight can be especially

relevant for women in leadership positions as they face role and gender stereotypes that can threaten their levels of perceived efficacy (Bosak & Sczesny, 2008; Hoyt & Blascovich, 2007; Pajares, 2002a; Pajares, 2002b).

The most salient influences on self-efficacy are mastery-building opportunities, vicarious experiences, intrinsic motivation/emotional arousal toward bettering performance, and verbal persuasion or encouragement from others (Bandura, 1997). Research studies such as those cited in the previous paragraph have ascertained that interventions that provide some or all of these influences can raise self-efficacy levels. Being involved in mastery-building experiences in interactive group settings creates opportunities for participants to also receive verbal encouragement and learn vicariously from others. Self-reflection that often accompanies mastery experiences may also spark intrinsic motivation. Based on these reasonings, the theoretical assumption that guided this study was: *leadership self-efficacy would be increased for women who participated in intentional mastery-building opportunities that focused on leadership*. Although research has been conducted on leadership self-efficacy (see Paglis &

Green, 2002), and women's self-efficacy (see Hoyt & Blascovich, 2007), studies that examined women's self-efficacy specific to leadership are rare.

Rarer still are studies that measured women's self-efficacy before and after mastery-building experiences specifically intended to enhance leadership development and performance. One such intervention that has been anecdotally heralded (Hart & Silka, 1994) and quantitatively supported for increasing self-efficacy is participation on challenge courses¹ (Gillis & Speelman, 1994). This study attempted to address the void in women's leadership self-efficacy research by measuring self-efficacy in relation to enrollment in a graduate level college course intentionally focused on women and leadership that included a multi-day challenge course experience. In addition to the assumption that leadership self-efficacy would be increased for women because of their enrollment in the class, the researchers also believed that higher levels of self-efficacy would be evident because of their participation in the challenge course experiences. It was further predicted that changes in self-efficacy, if any, would be accompanied by changes in perceptions of leadership values or attributes and of perceived obstacles to participants' leadership effectiveness.

Purpose of the Research

The purpose of this three-year mixed-method study was to explore changes that occurred in women's self-efficacy and the leadership values/attributes and obstacles they perceived as a result of participating in graduate coursework focused on women's leadership issues. An additional secondary purpose was to identify what relationships existed, if any, between those changes and the inclusion or non-inclusion of a multi-day challenge course experience.

Review of the Literature

The research in self-efficacy is widespread through many disciplines. This review of the literature begins with those that are specific to women and self-efficacy. That section will be followed by a discussion of research that was not focused on gender in particular, but rather on self-efficacy in general that bears relevance to the findings and discussions for this study.

Self-efficacy for Women

There has been a great deal of research investigating the relationship of self-efficacy and health-related behaviors in women. A sampling of recent research included studies on

nutrition, exercise, childbirth, HIV/AIDS, and physical activity. Some of these health-related studies analyzed correlations between high levels of self-efficacy and better, more desirable performance. For example, Annesi (2011) found that self-efficacy mediated more effective self-regulation for women who were starting an exercise and nutrition program. McAuley et al. (2007) ascertained that self-efficacy mediated the association between functional limitations and physical activity in older women. Ip, Tang and Goggins (2009) concluded that increased self-efficacy of Chinese women towards childbirth resulted in decreased pain and anxiety in the first two stages of labor.

Other health-related studies with female participants focused on measuring changes in self-efficacy as the result of experimental or quasi-experimental interventions. Jones, Owens, Lydston, Tobin, Brondolo, and Weiss (2010) determined that HIV-positive women who completed a stress management and supportive therapy intervention increased in measures of self-efficacy and had significant decreases in depression and anxiety compared to the control group. Stuifbergen et al. (2010) evaluated self-efficacy in women with fibromyalgia syndrome and found that both those who underwent an intervention program, as well as those in the control group who received fibromyalgia related education, showed significant increases in self-efficacy. Wingood et al. (2011) developed a health educator-delivered intervention and reported increases in self-efficacy for Latina women related to negotiating safer sex and condom use, accompanied by heightened HIV knowledge.

Publications from other fields have also considered self-efficacy in women. Dickerson and Taylor (2000) investigated psychology and business students and found that students were more likely to choose a leadership task when their self-efficacy for that task was high, and more likely to choose a subordinate role in completing a task when their self-efficacy for the task was low. Hart and Silka (1994) presented a hypothesis that a ropes course could be used as a learning laboratory to improve leadership self-efficacy in women. Hoyt and Blascovich (2007) found that leadership self-efficacy in women moderated the effects of stereotype activation and that women with high self-efficacy increased perceived performance, increased rated performance, and had a higher sense of well-being. Yanar, Budworth, and Latham (2009) found that training women in verbal self-guidance increased their self-efficacy with regard to re-employment. The women also persisted longer in job searches and were more likely to find a job in their area of interest.

Self-efficacy for All

Many studies have been conducted in education that involved students, teachers, or learning. Corkett, Hatt, and Benevides (2011) found that teachers' perceptions of students' self-efficacy were significantly correlated with the abilities of the students, but the students' self-efficacy towards literacy was not correlated with their actual ability. Swackhamer, Koellner,

¹ Challenge courses entail obstacles, called elements, constructed in trees or vertical poles that pose physical challenges to groups and individuals. These elements may take place near ground level or climbing to heights of 30 feet or more. Reflective discussion takes place before, during, and after participants complete the elements. Challenges and reflections are aligned with specific learning objectives such as communication, problem solving, trust, leadership, or self-efficacy.

Basile, and Kimbrough (2009) correlated middle school teachers' higher self-efficacy toward teaching with completing four or more math and science content-focused courses.

Kitsantas, Cheema, and Ware (2011) connected decreased achievement gaps with an increase in homework resources and mathematics self-efficacy. Mills, Pajares, and Herron (2007) investigated French language learning and reported that self-efficacy for self-regulation was more important than self-efficacy towards obtaining high grades.

A small assortment of research has been conducted relative to adventurous activities such as wilderness expeditions, parachuting, and challenge courses. Propst and Koesler (1998) found that participation in a National Outdoor Leadership School course increased self-efficacy towards outdoors tasks with gains that lasted for at least one year on most tasks. They theorized that improved self-efficacy led to continued involvement and therefore improved outdoor leadership skills. Samuels, Foster, and Lindsay (2010) found that United States Air Force Academy cadets who participated in freefall parachuting training had significantly higher scores in leader self-control efficacy and leader assertiveness efficacy than participants who participated in soaring training or no training at all. Stadler and Kotze (2006) found that utilizing a challenge course to increase leadership self-efficacy of young career officers in the South African National Defense Force was not successful, but they theorized that a more holistic approach to improving self-efficacy would have provided higher results.

In summary, current research literature supports Bandura's theory that self-efficacy can positively influence achievement and performance, and further that self-efficacy can be increased through an array of intentional interventions. There is increasing variety in studies, and while the evidence is not absolute, it appears that all fields can benefit from efforts to increase self-efficacy. However, research focused on women's self-efficacy concerning leadership is still limited and is especially true for studies that investigate specific interventions to increase leadership self-efficacy in women. The review of research in this area affirms that there is a need for future inquiry in the realm of women's leadership self-efficacy, which this particular study sought to address.

Methods

This mixed-method study examined changes in women's leadership self-efficacy and their perceptions of leadership values and attributes. A self-efficacy scale and questionnaire adapted from Bandura (2006) was created to survey students participating in a graduate level university class focused on women's leadership. The first two years that the class members were surveyed included a challenge course experience over a one-week time period with learning objectives specific to leadership. The third year of the survey, the challenge course was not included and the class meeting times were changed to once weekly over a five-week period. The course curriculum,

content, and instructor were the same for all three years of the study.

Participants

The initial participants in the first two years of this study were students enrolled in a graduate level course, *Women and Leadership*, at a mid-sized four-year university in the United States. Data were analyzed from eleven women who enrolled in the course during the summer of 2009 and nine women who were enrolled in the summer of 2010.

In the third year of the study during the summer of 2011, when the challenge course was not a part of the *Women and Leadership* course, 12 women completed the survey, for a total of 32 study participants. [Note: The data from the male students (n = 7 over all three years) were not analyzed for this study due to low numbers each year].

The 3rd year participants were viewed as a quasi-comparison group, acknowledging that the time/year differences and changes in course design allowed for confounding variables to emerge. The ages of the female participants ranged from approximately 22 to 60 years of age. All participants were graduate students, most of whom were also working professionals in higher education, K-12 schools, or other educational settings. Most of the participants were graduate students in an education-related program.

Data Collection

Instrumentation. Albert Bandura's (2006) self-efficacy scales have been confirmed over time as valid and reliable instruments for measuring levels of confidence for particular groups of people such as adolescents, parents, and teachers pertaining to various behaviors. Bandura's scales, or adaptations of them, have been used for researching adolescent self-efficacy (Caprara, Pastorelli, Regalia, Scabini, & Bandura, 2005); exercise self-efficacy (Everett, Salamonson, & Davidson, 2009); efficacy in managing pain (Turner, Ersek, & Kemp, 2005); chronic disease management (Lorig et al., 2001), and child/parent self-efficacy in relation to career interests (Bandura, Barbaranelli, Caprara & Pastorelli, 2001). Teacher self-efficacy scales rooted in Bandura's work have been widely utilized and validated by research teams such as Gibson and Dembo (1984), Hoy and Woolfolk (1990), and Tschannen-Moran and Woolfolk Hoy (2001). Bandura did not create a scale specific to leaders or leadership; therefore his scale for teaching efficacy was adapted to create the Leadership Self-Efficacy Scale (LSES) for this study.

The LSES contained 21 leadership behaviors in the areas of Influencing Decision-making, Motivating Others, Enlisting Outside Involvement, Creating a Positive Work Climate, and Encouraging a Productive Work Ethic (see Appendix A for scale). For each of the 21 items, participants were asked to rate how certain they were (their degree of confidence from 0 to 100) that they could accomplish the behaviors listed (e.g.,

Motivate people who show low interest in work). A score of zero indicated, "I cannot do at all", a score of 50-60 indicated, "I moderately can do", and a score of 100 indicated, "I certainly can do". Many of Bandura's (2006) scales have been set up this way asking respondents to provide a rating between 0 and 100. On some of his scales, similar items appear, but in question form (e.g., How much can you influence....?) and with numbered Likert-scale responses providing ranges similar to "Nothing" to "Some Influence" to "A Great Deal".

In modifying the LSES from Bandura's original 2006 teacher efficacy scale, a few non-applicable items were removed and a few items were combined to reduce the original scale of 30 response items to 21 items. There were questions, for example, that were specific to enlisting parental help at school. Those were not relevant for this study and so were subsequently removed. For other items, the term *school* was replaced with *organization* or *work*, and the term *students* was replaced with *people* or *workers*. Other wordage was minimally adjusted to retain the meaning and intent of each item while shifting to an organizational leadership focus. For instance, rather than being asked to rate their confidence level on *reducing school absenteeism*, they were asked to rate their confidence for *reducing turnover rates of workers*.

Open-ended questions were also included, creating the LSES & Questionnaire, or LSES & Q. The open-ended questions inquired about the most important leadership values the participants felt that effective leaders do or should exhibit, what attributes they themselves exhibited that were weakest or strongest, and what obstacles they perceived prevented them from becoming more effective leaders. Brief demographic information was also collected on gender and age categories.

Procedures. Participants from the first two summers completed a pre-experience LSES & Q just prior to their first session on the challenge course on the first day of the class, followed by a post-experience LSES & Q within a few hours of their last challenge course session a week later. Due to the remainder of the course being on-line the LSES & Q was given before the course ended for the first two years of the study. This will be addressed in greater detail in the discussion section. Participants from the third summer completed the LSES & Q on the first day that the class met, and on the last day five weeks later -- again, the third group did not participate in a challenge course experience as part of the class curriculum. The schedule for the *Women and Leadership* course during the first two summers consisted of meeting for six hours a day, Monday through Friday, for a one-week period of time. Mornings entailed meeting in a classroom; afternoons were spent participating on the outdoor challenge course. Classroom content and dialogue were all focused on women's issues in relation to leadership. Content included historical, current, and future roles of women in leadership; experiences of specific diverse women leaders; and influences of gender, race/ethnicity, and class on leadership. Activities included

limited lecture, discussion of readings, guest speakers, guided verbal and written reflection, and films to engage in discussions and critical analyses of women's roles in leadership. After the one intensive week of class meetings, the remainder of the course provided for an additional two weeks using an online instructional program that involved additional readings, reflections, and online assignment submissions. An example of this work was the "Your Story" reflection. This assignment was designed to get students to reflect on where their leadership skills came from and what meaningful leadership experiences they had.

The challenge course experiences began with challenges that required group decision-making, problem solving, and collaboration to reach completion (e.g., piecing together a puzzle of large foam pieces with each person having one clue to the solution). The latter part of the week was devoted to individually attempting the elements that required climbing several feet above the ground. These included challenges such as walking across a horizontal wire or jumping off a 40' pole while attached to a human belayer and back-up team of classmates on the ground via a rope and climbing harness.

Guided reflection was woven throughout the activities by a trained challenge course facilitator at various stages of completing each group or individual element. These reflections sometimes considered group efficacy/leadership behaviors (i.e., How did the groups' motivation influence the end result?), and sometimes focused on individual efficacy/leader behaviors (i.e., What did you contribute to help the group accomplish its goal? When you wanted to quit climbing, what did you think or say to yourself that caused you to continue?).

During the third summer of this study, the *Women and Leadership* course was re-designed and did not include any challenge course experiences. The course schedule spanned a five-week period of time with classroom meetings held once a week in the evenings. Between class meetings, an online instructional program was employed.

Data Analysis

Quantitative. Pre- and post- LSES measures were analyzed using brief descriptive statistics, t-tests, and measures of central tendency calculated with SPSS/PASW 18 quantitative analysis software. Aggregated two-tailed paired sample t-tests were run on each of the 21 items on the LSES scale individually, and also for each of the five grouped leadership dimensions of Influencing Decision-making, Motivating Others, Enlisting Outside Involvement, Creating a Positive Work Climate, and Encouraging a Productive Work Ethic. Additionally, independent sample t-tests were conducted on data from the years when the challenge course was included in the curriculum (2009 and 2010) and compared with data when the challenge course was not included (2011).

Qualitative. Open-ended questions were analyzed using open (initial) and axial (categorized) coding. Analysis for the 2009

survey led to identification of salient and common terms pertaining to the most admirable values or attributes exhibited by leaders, as well as obstacles that the participants perceived kept them from being the most effective leaders they could be. The categorized data were then further analyzed by comparison of pre- and post- experience responses.

After the 2010 data sets were collected, analysis was conducted on combined 2009 and 2010 data to reduce researcher bias or sway toward confirming the previous first year results. In some cases, new categories were identified through axial coding; in some cases the original categories were affirmed. Next, in order to analyze potential changes between pre- and post-experience responses, terms were identified that were common in both the pre- and post- questionnaires. Then, responses were identified that were unique only to *either* the pre- or post-experience questionnaires, and subsequently interpreted for meaning in relation to changes in leadership self-efficacy. The data for the 2011 questionnaire were analyzed using the same initial and categorized coding processes, and then compared to the combined 2009 and 2010 data. Results were quite similar, with a few unique items noted and reported in the Findings section below.

Discussion of Findings

Levels of Self-Efficacy

Aggregated quantitative data sets from the three years of scale surveys revealed increases in self-efficacy for each of the 21 individual items; however these increases did not occur for some items when separate years of data were analyzed. Similarly, aggregated data showed increases in self-efficacy across all five of the leadership dimensions on the Leadership Self-Efficacy Scale (Influencing Decision-making, Motivating Others, Enlisting Outside Involvement, Creating a Positive Work Climate, and Encouraging a Productive Work Ethic). Some of these increases were found to be statistically significant. There were no significant differences (increases or decreases) in self-efficacy scores for those who did or did not participate on the challenge course as a part of the *Women and Leadership* curriculum.

Individual leadership self-efficacy items. Each of the 21 LSES items showed aggregated increases in levels of self-efficacy from the pre- to the post- experience surveys. There were nine that revealed increased post-experience self-efficacy scores that were significantly higher ($p = < 0.05$) than the pre-experience scores. In rank order, these were *overcoming the influence of adverse working conditions* (.000), *earning respect from the most difficult workers* (.002), *influencing decisions that are made in my organization* (.003), *earning respect for my decisions* (.005), and *controlling negative or toxic behavior in the workplace* (.006), and *reducing turnover rates of workers* (.006). The remaining were *influencing people to enjoy coming to work* (.012), *increasing collaboration between workers and administration* (.012), *getting people to trust others* (.022), and *getting people to believe they can do well in their work* (.022).

Commonalities for these significant score items are not apparent although most are indicative of change or resolve toward more positive and respect-worthy dispositions and behaviors. The item that does not fit as neatly into that interpretation is reducing worker turnover, unless that turnover was viewed as a result of negativity in the workplace and hope was ignited that positive change or influence was possible.

Aggregated self-efficacy dimensions. Table 1 reveals the mean scores for the combined aggregated group data for all three years of the study. There were gains in levels of leadership self-efficacy in each of the five dimensions with the largest gains in Creating a Positive Work Climate (+8.00 %) and Encouraging a Productive Work Ethic (+8.83 %). These two dimensions are again, as mentioned in the previous paragraph, indicative of a resolve to demonstrate a more positive and respectful approach to work and leadership.

The greater increases in the dimensions of Positive Work Climate and Productive Work Ethic make sense when the qualitative findings are also considered. As discussed in that section (see Leadership Values), it appeared that the women experienced an increased awareness of their own leadership development and things within themselves they could proactively change. The individual items in those dimensions addressed trust, safety, overcoming adversity, helping, collaborating, and encouraging others -- actions and behaviors that come from self-determination within and from belief in one's own ability, ergo self-efficacy.

The dimension with the third largest increase was Influencing Decision Making (+6.32), and held the highest mean scores for both the pre- and post- surveys. High efficacy in pre-LSES scores for making decisions could be a reflection of job function as well as autonomous decision-making processes. The increased scores may demonstrate a perception of being able to affect those processes to a higher extent in the future, or a higher belief in the rightness or soundness of the individual's decisions and an increased resolve to be more adamant about them.

The dimension with the lowest gains was Enlisting Outside Involvement with an increase of only 3.49 %. It should be noted that dimension also held the lowest self-efficacy mean scores for both the pre- and the post- LSES, beginning at a level of 64.32 % confidence and ending with a confidence level of only 67.81%. It is possible that these low scores were the result of the nature of the positions held by the participants, meaning that enlisting outside involvement may not have been a function or priority of the person's job responsibilities or may not have been a function or priority of the organization. Therefore, low pre- and post- ratings were given and very little gain occurred as a result of enrolling in the class for that dimension.

Table 1

Aggregated Mean Scores in Five Dimensions of Leadership Self-Efficacy

Leadership Self-Efficacy Dimensions	Pre-experience Mean Scores	Post-experience Mean Scores	Difference
Influencing Decision Making	78.52	84.84	+6.32
Motivating Others	71.79	75.48	+3.69
Enlisting Outside Involvement	64.32	67.81	+3.49
Creating a Positive Work Climate	74.21	82.21	+8.00
Encouraging a Productive Work Ethic	69.02	77.85	+8.83

Note: Self-efficacy scores designate percent of confidence on a 0-100 point scale.

Three dimensions of leadership self-efficacy revealed changes that were statistically significant ($p < 0.05$). These were, Creating a Positive Work Environment (.003), Influencing Decision Making (.011), and Encouraging a Productive Work Ethic (.017). The largest standard deviation (see Table 2) was in the dimension of Enlisting Outside Involvement (24.39), again perhaps due to disparity in the nature of the participants' job responsibilities.

The smallest or tightest standard deviation was for Motivating Others (11.95). A plausible explanatory interpretation of this is that the behavior of motivating co-workers, peers, supervisors, or subordinates can be a part of everyone's work day regardless of job duties, unless someone works in total isolation. The mean of the difference for that dimension was 73.64 %, a score that reveals a self-perception of above average (much more than 50 %), but with the recognition that one can always do better in encouraging and trying to motivate those around them.

Table 2

Differences in Pre- and Post- Scores in Five Dimensions of Leadership Self-Efficacy

Leadership Self-Efficacy Dimensions	Difference in Mean Scores	Standard Deviation	Significance
Influencing Decision Making	+6.32	13.28	.011*
Motivating Others	+3.69	11.95	.091
Enlisting Outside Involvement	+3.49	24.39	.424

Creating a Positive Work Climate +8.00 14.19 .003*

Encouraging a Productive Work Ethic +8.83 19.75 .017*

Note: * 2 -tailed level of significance ($p < 0.05$)

Challenge course vs. no challenge course. Table 3 provides a comparison of the combined 2009 and 2010 increases in LSES scores with the 2011 score increases, the year when the class members did not participate on the challenge course. None of the scores for the five dimensions were significantly higher for the 2009 and 2010 groups who participated on the challenge course. Rather, quite the opposite occurred: the increases in LSES scores were lower in all five dimensions for the challenge course groups than for the group that did not participate on the challenge course.

When the 2009 results were compared with the 2010 results, increases in leadership self-efficacy for the 2010 group were substantially higher than for the previous summer. Although the class instructor and cognitive content were the same for all three years of the study, it is likely that the instructor made yearly adjustments that may have improved the class with each offering. Different challenge course facilitators could have been a factor. Group culture could have been a factor. Even weather may have influenced the results.

Additionally, increases in leadership self-efficacy were higher on some 2009 and 2010 individual survey items than for the 2011 non-challenge course group. Although these results are different than predicted, there is a plausible explanation. During the first two summers, the post-LSES was completed following the last challenge course day at the end of the first week of the class. Approximately 15% of the class was not completed yet with additional course content provided in the remaining two weeks via online instruction. For the group that did not participate on the challenge course, the post-LSES was completed at the end of the last day of the class after 100 % of the course content had been provided. This may indicate that the remaining unfinished portion of the class had bearing on the results. Also the difference in schedule time frames may have had an affect (three weeks for the first two summers vs. five weeks for the last summer). Perhaps a longer period of time is needed to digest, reflect, and adjust dispositions and confidence levels.

Table 3

Comparison of Leadership Self-Efficacy Increases Between Challenge Course Participation and Non-participation as Part of the Class Curriculum

Leadership Self-Efficacy Dimensions	Increase in Mean Scores w/ Challenge Course (n = 20)	Increase in Mean Scores w/o Challenge Course (n = 12)
Influencing Decision Making	+1.89	+13.71
Motivating Others	+1.45	+7.42
Enlisting Outside Involvement	+3.33	+3.75
Creating a Positive Work Climate	+3.38	+15.70
Encouraging a Productive Work Ethic	+3.71	+17.35

Leadership Values

In the 2009 qualitative data, there were several leadership values or attributes that were identified in both the pre- and post- experience questionnaires. These included common societal values that are not usually limited to leadership such as *integrity*, *trust*, and *compassion*. Others did have more of a leadership connotation or expectation about them (*vision*, *confidence*, *intelligence*). When these results were further analyzed, though, for values that were unique to *either* the pre- or post- questionnaires, a distinct shift emerged. In the pre-experience questionnaires, values such as *powerful*, *decisive*, *influential*, and *ability to delegate* were listed. In the post-questionnaires, values such as *encouragement*, *passion*, *belief in others*, and *authenticity* appeared. This was interpreted as a shift from more traditional, authoritative, often male-associated leadership attributes to more postmodern, participative, often female-associated values or attributes. Furthermore, these results were interpreted to show an affirmation that it is acceptable to be true to one's gender and self (i.e., authentic) even in leadership situations -- behaviors that aren't as yet universally accepted.

Analysis of the combined years of 2009 and 2010 data unveiled the same shifts in terminology, with only a few additions when the 2011 data were conjoined. Additionally, themes emerged of leadership values that were more inwardly-experienced or *Known by Self* and those that were more outwardly-visible or *Revealed to Others*. In other words, other people don't necessarily know if a leader is honest, ethical, motivated, or authentic. Only the leaders themselves know those things. Other attributes such as consistency, knowledge of the

business, and including the voice of others are things that are revealed and detectable by others. Interestingly, most of the leadership values listed in all questionnaires were those that were revealed to others. However, the percentage of those known by self greatly increased in the post-experience questionnaires. One explanation of this increase was the realization that leadership does come from within, or is more about what a person is than how a person impresses or uses their power. Another explanation is the realization by the women that they themselves had the ability and/or responsibility to develop their own leadership values and attributes; hence the result of increased leadership self-efficacy. Table 4 displays the increases in values *Known by Self* and the shift that occurred in participants' terminology.

Table 4

Most Admirable Values or Attributes That Effective Leaders Exhibit

Responses in Both Pre- and Post-Questionnaires <u>2009 & 2010</u>	Responses Unique to Pre-Questionnaires <u>Known by Self</u>	Responses Unique to Post-Questionnaires <u>Known by Self</u>
Trust	Honesty	Authenticity
Integrity	Motivation	Sense of self
Vision	Ethics	Awareness
Confidence		Investment
Compassion/Respect	<u>Revealed to Others</u>	Passion
Good communication/Listen	Work ethic	Courage/Belief in self
Intelligence/Knowledge	Clarity of goals	
	Ability to deliver	<u>Revealed to Others</u>
<u>2011</u>	Consistency	
The above plus:	Interest in people	Caring/Care for others
Support/Encouragement	Knowledge of the business	Include the voice of others
	Ability to influence others	Belief in others
	Ability to delegate	Embrace of diversity
	Strong/Powerful	Understanding
	Decisiveness	Collaboration
		Maker of safe space

Obstacles to Effective Leadership

When similar analyses were employed for the question pertaining to the obstacles that prevented participants from being the most effective leader they could be (see Table 5), another shift appeared, albeit more subtle, from self-critical behaviors (e.g., *self-sabotage*, *lack of focus*) and things done to them (e.g., *confrontational people*, *good old boys*) to the identification of behaviors or actions they could affect (e.g., *taking initiative*, *lack of mentors*, *willingness to imagine*). This also was interpreted as evidence that there were increases in self-efficacy and the belief that the potential for change and

betterment resided within rather than without. The obstacle of *confidence* was identified in all of the pre- and post- experience questionnaires, indicating that many of the participants felt they needed more confidence both before and after the conclusion of the *Women and Leadership* course. Although the quantitative and qualitative data provided evidence of increases and adjustments in thinking relative to their leadership self-efficacy, it is possible that these changes were not consciously evident to the women themselves.

Table 5
Main Obstacles to Effective Leadership

Responses in Both Pre- and Post- Questionnaires	Responses Unique to Pre- Questionnaires	Responses Unique to Post- Questionnaires
Lack of confidence	Self-sabotage	Not taking the initiative
Finishing graduate degree	Defeatism	[Lack of] willingness to
Not enough time	Dealing with confrontational people	imagine or dream
Lack of experience	Conflict resolution	Not letting go of past failures
	Lack of focus	Lack of mentors
	Politics/Good old boys	Myself
	Gender	

Conclusion

The purpose of this study was to investigate changes in leadership self-efficacy levels derived from a graduate level course that intentionally focused on women's leadership issues. Investigation of the influence of a challenge course experience on self-efficacy levels was a secondary purpose. However, it was presumed that the challenge course would have a positive effect, and the results herein indicated an opposite negative effect in comparison to the non-challenge course groups. The confounding variables that interfered with the ability for this to be a true quasi-experiment were the different time frames that the surveys were conducted in relation to the class completion dates. The results did affirm that participation in the class in its entirety did increase leadership self-efficacy more than the class in its partiality.

Bandura (2006) consistently cautioned that self-efficacy is specific to various activities or functions. That is, someone may have high parenting efficacy, but low pain-management efficacy. Therefore, there is not a universal self-efficacy scale that fits all realms of our lives. Likewise, self-efficacy in similar realms may vary greatly depending upon the environment within which someone is operating. Leadership self-efficacy may rise and fall throughout a person's career, in different organizations, or surrounded by different people. This results, then, in "much ambiguity about exactly what is being measured or the level of task and situational demands that must be managed" (p. 307).

Although social cognitive theory has established a relationship between high self-efficacy and higher performance, efficacy levels do not solely determine performance. Capabilities are also influenced by "higher-order self-regulatory skills" (Bandura, 2006, p. 308) such as problem diagnosis and resolution, design thinking, goal setting, motivation toward task completion, and creating "self-incentives to sustain engagement" (p. 308). Individual efficacy levels can also be dependent on group-efficacy levels and if the environment has a positive or negative effect on healthy group cultural norms.

In essence, self-efficacy is a complex concept that is not succinctly measurable or conclusive. Although it has been researched for decades, and much is known and understood, there is still ample need to learn more. What we can conclude from this particular study on leadership self-efficacy is that the findings did demonstrate that intentional provision of leadership focused opportunities for women can increase their levels of leadership self-efficacy. More specifically, the results of this study affirmed that self-efficacy can be influenced through Bandura's claims that mastery-building opportunities (class and challenge course activities focused on women and leadership), vicarious experiences (observation of and learning about leadership from others), and encouragement (support from classmates, instructors, and challenge course facilitators). These findings further lend support to social learning theory, shaped by Bandura (1977, 1997, 2004, 2006) and others, by way of providing opportunities to observe and replicate leadership behaviors of other women.

Significance

This research will be most beneficial in organizational cultures where leadership knowledge, skills, and dispositions are valued, encouraged, and supported for women. Organizations and those who lead them can begin immediately to implement learning opportunities where such increases in self-efficacy can be fostered. Implications that can be derived from this study, then, suggest that more experiences for developing self-efficacy for women should be created. When asked what obstacles existed that prevented the participants from being the most effective leaders they could be, one responded, "There are very few obstacles. It's just a matter of finding the right opportunities."

Need for Further Research

The number of participants in this study was small, and the findings would be further substantiated with larger sample sizes. Additionally, conducting similar research using quasi-experimental designs with simultaneous treatment and comparison groups is a logical next step to cement the findings of this study. Although these results indicated that intentional leadership-focused activities can and do increase levels of self-efficacy for women, it is not known if similar intentional experiences can also affect leadership self-efficacy levels across the full spectrum of gender identities in society. There is further need to examine all four of the influencing factors that

Bandura (1997) emphasized as variables on leadership self-efficacy (mastery building experiences, vicarious experiences, intrinsic motivation/emotional arousal, and persuasion or encouragement from others). Such research would increase the generalizability for the small body of literature that exists pertaining to leadership self-efficacy.

References

- Annesi, J. J. (2011). Relationship of initial self-regulatory ability with changes in self-regulation and associated fruit and vegetable consumption in severely obese women initiating an exercise and nutrition treatment: Moderation of mood and self-efficacy. *Journal of Sports Science and Medicine*, 10, 643-648.
- Bandura, A. (1977). *Social learning theory*. Upper Saddle River, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura, A., Barbaranelli, C., Caprara, G. V., Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72(1), 187-206.
- Bandura, A. (2004). Cultivate self-efficacy for personal and organizational effectiveness. In E. Locke (Ed.), *The handbook of principles of organizational behavior* (pp. 120-136). Malden, MA: Blackwell Publishing.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In T. Urdan & F. Pajeres (Eds.), *Self-efficacy beliefs of adolescents* (pp. 307-337). Charlotte, NC: Information Age Publishing.
- Bosak, J., & Sczesny, S. (2008). Am I the right candidate? Self-ascribed fit of men and women to a leadership position. *Sex Roles*, 58, 682-688. doi: 10.1007/s11199-007-9380-4
- Caprara, G. V., Pastorelli, C., Regalia, C., Scabini, E., & Bandura, A. (2005). Impact of adolescents' filial self-efficacy on quality of family functioning and satisfaction. *Journal of Research on Adolescence*, 15(1), 71-97.
- Corkett, J., Hatt, B., & Benevides, T. (2011). Student and teacher self-efficacy and the connection to reading and writing. *Canadian Journal of Education*, 34(1), 65-98.
- Dickerson, A., & Taylor, M. A. (2000). Self-limiting behavior in women. *Group & Organization Management*, 25(2), 191-210.
- Everett, B., Salamonson, Y., & Davidson, P. M. (2009). Bandura's exercise self-efficacy scale: Validation in an Australian cardiac rehabilitation setting. *International Journal of Nursing Studies*, 46, 824-829.
- Gibson, S. & Dembo, M., (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582.
- Gillis, H. L., & Speelman, E. (2008). Are challenge (ropes) courses an effective tool? A meta-analysis. *Journal of Experiential Education*, 31(2), 111-135.
- Hart, L., & Silka, L. (1994). Building self-efficacy through women-centered ropes course experiences. *Women & Therapy*, 15(3/4), 111-127.
- Hoy, W. K., & Woolfolk, A. E. (1990). Organizational socialization of student teachers. *American Educational Research Journal*, 27, 279-300.
- Hoyt, C. L., & Blascovich, J. (2007). Leadership efficacy and women leaders' responses to stereotype activation. *Group Processes & Intergroup Relations*, 10(4), 595-616.
- Ip, W. Y., Tang, C., & Goggins, W. B. (2009). An educational intervention to improve women's ability to cope with childbirth. *Journal of Clinical Nursing*, 18, 2125-2135.
- Jones, D. L., Owens, M. I., Lydston, D., Tobin, J., Brondolo, E., & Weiss, S. M., (2010). Self-efficacy and distress in women with AIDS: the SMART/EST women's project. *AIDS Care*, 22(12), 1499-1508. doi: 10.1080/09540121.2010.484454
- Kitsantas, A., Cheema, J., & Ware, H. W. (2011). Mathematics achievement: The role of homework and self-efficacy beliefs. *Journal of Advanced Academics*, 22(2), 310-339.
- Lorig, K. R., Ritter, P., Stewart, A. L., Sobel, D. S., Brown, B. W., Bandura, A., Gonzalez, V. M., Laurent, D. D., & Holman, H. R. (2001). Chronic disease self-management program: 2-year health status and health care utilization outcomes. *Medical Care*, 39(11), 1217-1223.
- McAuley, E., Morris, K. S., Doerkson, S. E., Motl, R. W., Hu, L., White, S. M., Wojcicki, T. R., & Rosengren, K. (2007). Effects of change in physical activity on physical function limitations in older women: Mediating roles of physical function performance and self-efficacy. *Journal of American Geriatrics Society*, 55, 1967-1973. doi: 10.1111/j.1532-5415.2007.01469.x
- Mills, N., Pajares, F., & Herron, C. (2007). Self-efficacy of college intermediate French students: Relation to achievement and motivation. *Language Learning*, 57(3), 417-442.
- Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and manager's motivation for leading change. *Journal of Organizational Behavior*, 23(2), 215-235.
- Pajares, F. (2002a). *Self-efficacy beliefs in academic contexts: An outline*. Retrieved March 3, 2012, from <http://www.des.emory.edu/mfp/efftalk.html>
- Pajares, F. (2002b). Gender and perceived self-efficacy in self-regulated learning. *Theory into Practice*, 41(2), 116-125.
- Propst, D. B., & Koesler, R. A. (1998). Bandura goes outdoors: Role of self-efficacy in the outdoor leadership development process. *Leisure Sciences*, 20, 319-344.
- Samuels, S. M., Foster, C. A., & Lindsay, D. R. (2010). Freefall, self-efficacy, and leading in dangerous contexts. *Military Psychology*, 22(1), 117-136. doi: 10.1080/08995601003644379
- Sczesny, S., Bosak, J., Neff, D., & Schyns, B. (2004). Gender stereotypes and the attribution of leadership traits: A

- cross-cultural comparison. *Sex Roles*, 51(11/12), 631-645. doi: 10.1007/s11199-004-0715-0
- Stadler, K., & Kotze, M. E. (2006). The influence of a ropes course development programme on the self-concept and self-efficacy of young career officers. *Journal of Industrial Psychology*, 32(1), 25-32.
- Stuifbergen, A., Blozis, S., Becker, H., Phillips, L., Timmerman, G., Kullberg, V., Taxis, C., & Morrison, J. (2010). A randomized controlled trial of a wellness intervention for women with fibromyalgia syndrome. *Clinical Rehabilitation*, 24, 305-318.
- Swackhamer, L. E., Koellner, K., Basile, C., & Kimbrough, D. (2009, Spring). Increasing the self-efficacy of inservice teachers through content knowledge. *Teacher Education Quarterly*, 63-78.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education*, 17, 783-805.
- Turner, J. A., Ersek, M., & Kemp, C. (2005). Self-efficacy for managing pain is associated with disability, depression, and pain coping among retirement community residents with chronic pain. *Journal of Pain*, 6(6), 471-479.
- Wingood, G., DiClemente, R., Villamizar, K., Er, D., DeVarona, M., Taveras, J., Painter, T., Lang, D., & Others. (2011). Efficacy of a health educator-delivered HIV prevention intervention for Latina women: A randomized controlled trial. *American Journal of Public Health*, 101(12), 2245-2252.
- Yanar, B., Budworth, M. H., & Latham, G. P. (2009). The effect of verbal self-guidance training for overcoming employment barriers: A study of Turkish women. *Applied Psychology: An International Review*, 58(4), 586-601. doi: 10.1111/j.1464-0597.2008.00366.x

Appendix A: Leadership Self-Efficacy Scale and Questionnaire

This scale and questionnaire are designed to help gain a better understanding of the kinds of actions and behaviors that effect efficacy and create difficulties for people in various stages of developing their leadership. For the first 21 items, please rate how certain you are (your degree of confidence) that you can do the things listed below. Record a number from 0 to 100 on the line following each statement, using the scale provided in the shaded box:

0	10	20	30	40	50	60	70	80	90	100
I cannot					I moderately				I certainly	
do at all					can do				can do	

Influencing Decision Making Confidence (0-100)

Influence the decisions that are made in my organization ____

Express my views freely on important work matters ____

Obtain the materials and equipment I need to do my work ____

Earn respect for my decisions ____

Motivating Others

Earn respect from the most difficult workers ____

Keep people on task on difficult assignments ____

Motivate people who show low interest in work ____

Get people to work well together ____

Enlisting Outside Involvement

Get parent/community groups involved with the organization ____

Get other businesses involved with the organization ____

Get other schools and colleges involved with the organization ____

Creating a Positive Work Climate

Make the organization a safe place ____

Influence people to enjoy coming to work ____

Control negative or toxic behavior in the workplace ____

Get people to trust others ____

Overcome the influence of adverse working conditions ____

Encouraging a Productive Work Ethic

Help others with their professional skills ____

Increase collaboration between workers and the administration ____

Reduce turnover rate of workers ____

Reduce absenteeism ____

Get people to believe they can do well in their work ____

(LSES adapted from A. Bandura, 2006, *Teacher Efficacy Scale*, p. 328)