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CHARACTERIZATIONS OF SUCCESSFUL LEADERS:
A Comparison of Leadership and Non-Leadership Students

Abstract

This study compared characterizations of successful leaders held by students enrolled in a college level leadership education program to those of students who did not participate in the program. Participants consisted of students from the following groups: graduating seniors who completed the leadership program, students enrolled in the first course of the program, and students who never enrolled in leadership courses. Each participant rated a "successful leader" on descriptors from Duehr & Bono's (2006) Revised Descriptive Index. Scoring of these descriptors resulted in five leadership dimensions: agentic, communal, task-oriented, relationship-oriented, and transformational. Analyses compared these dimension ratings across the three groups of participants. Results revealed that non-leadership students ascribed significantly higher levels of agentic and task-oriented characteristics to successful leaders than both beginning and graduating leadership students. Non-leadership students also ascribed significantly lower levels of communal characteristics to successful leaders than graduating leadership students. Results showed no significant differences between the three groups of students in relationship-oriented or transformational characteristics ascribed to successful leaders. These finding have implications for leadership education.

Introduction

Leadership programs of study have become increasingly prevalent in higher education. These programs come in a variety of forms including majors, minors and certificates (Mitchell & Daugherty, 2019). A growing body of research examining the characteristics of leadership education programs reveals that, although leadership programs may differ in specific foci and goals (Perruci, 2014), their curriculum generally incorporates both theory and application (Brungardt, Greenleaf, Brungardt, & Arensdorf, 2006; Harvey & Jenkins, 2014). Research also indicates that students enroll in these programs with the primary purpose of becoming better leaders (Mitchell & Daugherty, 2019; Perruci, 2014), and that alumni believe their participation in these programs benefited their careers (Mitchell & Dougherty, 2019). There is limited information, however, on how students in these programs conceptualize leadership. Few studies examine student beliefs about what constitutes successful leadership. Furthermore, there is a lack of research on changes in conceptualizations of leadership that students may experience as a result of their leadership education (Grimes, 2015).

As interest in leadership education proliferates, researchers are beginning to examine college student

perspectives on leadership. Caza and Rosch (2014) emphasize the importance of understanding student beliefs in order to design more effective educational programs. In an exploratory study, they assessed undergraduate student beliefs about their own leadership using the Socially Responsible Leadership Scale (SRLS), a leadership self-efficacy scale, a social change behavior scale, and a perspective taking behavior scale. They found that socially responsible leadership dimensions predicted students' leadership self-efficacy, and suggested that students associated social responsibility with more effective leadership (Caza & Rosch, 2014). In another study, Wielkiewicz, Fischer, Stelzner, Overland & Sinner (2012) assessed incoming first year college student perceptions of leadership using the Leadership Attitudes and Beliefs Scale (LABS). Results showed that respondents tended to have a hierarchical perspective of leadership relative to a systemic or relational perspective of leadership, and that men had a more hierarchical perspective than women. When examining college student definitions of leadership, Haber (2012) also found that undergraduate students tended to hold traditional views of leadership, and that women held significantly less hierarchical and more relational views than men. These studies, while limited in number and scope, suggest that undergraduate students value social responsibility in leadership but also tend to hold a traditional hierarchical view of leadership. Because participants in these studies were non-leadership students or students in general, results cannot be generalized to students enrolled in leadership programs of study.

Rosch & Collier (2013) point to the importance of understanding how students who enroll in leadership education programs might differ from those who enroll in alternate programs. They assessed student self-rated leadership behaviors and orientation using the Transformational Leader Index (TLI), a Leadership Self-Efficacy scale (LSE) and Motivation to Lead scale (MTL). They found that students enrolled in a leadership course rated themselves significantly higher on transformational and transactional leadership behaviors and motivation to lead than students enrolled in a team-project course. The two groups did not differ on ratings of leadership self-efficacy. While this study demonstrated differences between leadership and non-leadership student perceptions about their own leadership, it did not examine how these two groups of students conceptualized successful leadership in general.

Previous studies provide insight into undergraduate students' perspectives about their own leadership as well as leadership in general. They also indicate differences in self-perceptions of leadership-related characteristics between leadership and non-leadership students. They do not, however, focus on examining the similarities and differences in beliefs about quality leadership held by undergraduate students in general and undergraduate students enrolled in leadership programs. Understanding students' conceptualizations about successful leadership before they begin their program of study can provide important baseline information for designing the content of a leadership program. This may be particularly useful in determining what theoretical aspects of leadership the program should address and how much emphasis should be placed on theory versus application. Studies examining how students completing leadership programs conceptualize successful leadership compared to students beginning a program of leadership education are also limited. Examination of these differences can contribute to our understanding of student development and serve as a foundation for continued research on leadership program impact.

A useful research framework for learning how students characterize leaders is the "think-manager-think-male" paradigm used to study gender stereotyping of leaders (Koenig, Eagly, Mitchell & Ristikari, 2011). In the original research introducing this paradigm, Schein (1973, 1975) instructed

participants to think of a type of person and rate that person on a set of 92 descriptors known as the Descriptive Index. To examine stereotypes, Schein varied the type of person each participant was instructed to rate and then compared ratings of the different types of people. This research approach became known as the "think-manager-think-male" paradigm because it revealed a strong association between ratings of successful middle managers and ratings of men, but a weak association between ratings of successful middle managers and ratings of women. Schein's research paradigm was applied repeatedly over time to examine changes in gender stereotyping of managers. In a follow-up study over 30 years after Schein's original work, Duehr and Bono (2006) added descriptors to Schein's (1973) original inventory that reflected modern theories of leadership. This resulted in a 118 item inventory referred to as the Revised Descriptive Index. Schein's research paradigm, while useful for examining potential shifts in gender stereotypes across time, can be adapted to address other research questions.

The purpose of the present study was to examine how students conceptualize successful leaders, and what differences in conceptualization exist between students in general, students beginning a leadership program of study and students completing a leadership education program. A modified version of the "think-manager-think-male" research paradigm was used to address these questions because, while early research involving this paradigm focused on characterizations of managers, the role of a leader is typically described differently and more broadly than that of a manager. Leadership is generally associated with motivating employees to achieve long-term goals of the organization and management is more commonly associated with task completion. For purposes of studying leadership characterizations, the instructions for completing the Descriptive Index or its updated version, the Revised Descriptive Index, can be revised to direct participants to focus on "leaders" rather than "managers." Applying this modification, the current study asked participants to rate a "successful leader" on the items of the Revised Descriptive Index. Participants represented three groups: undergraduate students in general, undergraduate students enrolled in the first leadership course in a leadership program of study, and undergraduate students completing the leadership program of study. Previous research findings suggest that leadership students will have different perspectives about successful leaders than non-leadership students, and that students completing a leadership education program will have different conceptualizations of successful leaders than students in general or students beginning a leadership program.

Method

Participants. Three groups of undergraduate college students from a private midwestern university participated in the study. The non-leadership group consisted of students enrolled in introductory psychology classes who completed the study for extra credit. The entry-level leadership group consisted of students enrolled in the first course of a leadership program. The graduating leadership group involved students in their final college semester who were completing their last course in the leadership program. In total, 145 college students provided complete data for the study. The majority of participants were female (62.6%), under age 20 (70.3%), and in their first year in college (56.0%). Table 1 contains descriptive information about participants overall and by group.

Table 1
Participant Characteristics by Leadership Education Condition

	Group			
	Overall	Non-Lead	Entry Lead	Grad Lead
Characteristic	$N = 145$	$n = 64$	$n = 54$	$n = 27$
Age				
Less than 20	82	43	39	0
20-24	51	10	14	27
25-30	5	5	0	0
Higher than 30	7	6	1	0
Gender				
Male	34	16	12	6
Female	111	48	42	21
Year in School				
1st year	50	21	29	0
Sophomore	43	30	12	0
Junior	14	3	8	0
Senior or above	38	10	5	27

Procedures. Non-leadership introductory psychology students participated in the study by completing questionnaires either on paper or electronically via Qualtrics. After analyses revealed no significant differences in responses from questionnaires obtained electronically or in paper form, I merged the two sets of data. Further analyses excluded any introductory psychology participants who indicated on demographic items of the questionnaire that they had taken leadership coursework. The coordinator of the leadership program facilitated recruitment of students from the leadership program by providing names of students enrolled in the introductory level leadership classes as well as names of students who were poised to graduate with a leadership degree. Students from each of these two groups received emails inviting them to participate in the study by completing the questionnaire through Qualtrics. The introductory level leadership students received email invitations at the beginning of the semester to ensure little coverage of leadership content at the time of survey completion. The graduating leadership students received email invitations during the semester in which they were going to graduate. The data collection process took place over three academic years.

Leadership Education Program. The leadership education program associated with this study is an interdisciplinary Leadership Concentration based on a social change model of leadership (Buschlen & Johnson, 2014; Komives & Wagner, 2009). The model has, as its foundation, eight leadership values: consciousness, congruence, commitment, common purpose, collaboration, controversy with civility, citizenship and change. The Leadership Concentration consists of 20 credit hours of leadership courses and leadership-related electives. The five leadership courses in the program combine traditional coursework with experiential coursework, and progress sequentially from a one credit introductory course to a 3-credit upper level practicum capstone course. The program emphasizes the values of the social change model throughout its leadership coursework. The capstone course requires students to develop and promote implementation of a program of social change in the campus community.

Table 2

Items by Leadership Dimension

Agentic	**Relationship-Oriented**
Aggressive	Compassionate
Ambitious	Cooperative
Analytical Ability	Fair
Assertive	Good listener
Dominant	Inclusive
Forceful	Intuitive
Self-Confident	Shows appreciation
	Sociable
Communal	Tactful
Aware of feelings of others	Understanding
Creative	
Helpful	**Transformational**
Kind	Attends to the needs of others
Passive	Considerate
Submissive	Considers others' ideas
Sympathetic	Encouraging
	Energetic
	Enthusiastic
Task-Oriented	Inspiring
Competent	Open-minded
Competitive	Optimistic
Decisive	Sense of purpose
Independent	Sincere
Industrious	Supportive
Intelligent	Trustworthy
Logical	
Objective	
Skilled in business matters	
Speedy recovery from emotional disturbances	

Note. From "Men, women, and managers: Are stereotypes finally changing?" by E. E. Duehr and J. E. Bono, 2006, *Personnel Psychology, 59*(4)*,* 815-846, Copyright by John Wiley and Sons. Adapted with permission.

Measures. The questionnaire completed by participants consisted of demographic items followed by Duehr & Bono's (2006) Revised Descriptive Index. Modified instructions for the Revised Descriptive Index asked participants in all three groups to think of "successful leaders in general," and then rate how characteristic each of the 118 descriptors was of "successful leaders" on a 5 point scale from "uncharacteristic" to "characteristic". Following Duehr & Bono's (2006) procedure, I combined a subset of adjective ratings from the Revised Descriptive Index to create five leadership dimension scores: agentic (7 items), communal (7 items), task-oriented (10 items), relationship-oriented (10 items), and transformational (13 items). Table 2 shows the items by dimension. Each dimension score consists of the average sum of ratings across items. Research shows that these dimension scores have good internal consistency reliability (Duehr & Bono, 2006).

Results

After confirming that leadership dimension scores were normally distributed, I computed Pearson r correlations to examine the interrelationships between dimensions. Table 3 provides the inter-correlations. Results showed strong significant positive associations between agentic and task-oriented leadership dimensions; and between communal, relationship-oriented, and transformational dimen-

-sions. The task-oriented dimension showed moderate significant positive correlations with the relationship-oriented and transformational dimensions. The agentic dimension showed small but significant correlations with the relationship-oriented and transformational dimensions.

Table 3
Intercorrelations between Leadership Dimensions

Dimension	2	3	4	5
1- Agentic	-.107	.688**	.182*	.183*
2- Communal	-	-.045	.600**	.569**
3- Task-Oriented		-	.348**	.305**
4- Relation-Oriented			-	.809**
5- Transformational				-

*p < .05, **p < .01.
N = 145.

A multivariate analysis of variance examined the effect of educational group, participant gender, and group by gender interaction on leadership dimension scores. According to the Wilk's Lambda criterion, there was a significant overall effect of educational group, $F(10, 270) = 4.62$, $p < .001$, but there was no significant effect of participant gender, $F(5, 135) = 1.25$, $p = .290$, and no significant group x gender interaction, $F(10, 270) = 1.14$, $p = .336$). Follow-up ANOVAs revealed significant effects of educational group on the following dimension ratings: agentic, $F(2, 139) = 14.77$, $p < .001$; communal, $F(2, 139) = 5.73$, $p = .004$; and task-oriented, $F(2, 139) = 9.77$, $p < .001$. Educational group had no significant effect on the following dimension ratings: relationship-oriented, $F(2, 139) = .69$, $p = .504$), and transformational, $F(2, 139) = .26$, $p = .776$).

Table 4
Mean Ratings of Leadership Dimension by Group

Group	Agentic	Communal	Task-Oriented	Relation-Oriented	Transform.
Non-Lead	26.81 [b] (3.27)	23.08 [b] (3.05)	41.39 [b] (3.23)	43.08 [a] (4.82)	57.00 [a] (6.60)
Entry Lead	23.19 [a] (3.61)	24.30 [ab] (2.99)	37.43 [a] (5.65)	41.98 [a] (6.06)	56.15 [a] (8.12)
Grad Lead	23.52 [a] (2.79)	24.89 [a] (2.15)	37.41 [a] (3.27)	43.26 [a] (3.70)	57.44 [a] (5.72)

Note. Standard deviations are in parentheses. Means in the same column that share subscripts were not significantly different (*p* < .05) in Bonferroni *post hoc* comparisons.

Post hoc Bonferroni comparisons examined group differences within dimension. Table 4 presents the results. The post hoc Bonferroni comparisons showed that non-leadership students rated successful leaders significantly higher on the agentic and the task-oriented dimensions than both entry

level leadership students and graduating leadership students. Non-leadership students rated successful leaders significantly lower on the communal dimension than graduating leadership students. The results showed no difference between non-leadership students and entry level leadership students on the communal dimension.

The dimension scores developed by Duehr & Bono (2006) derive from 47 out of the 118 items in the Revised Descriptive Index. Items comprising dimension scores therefore accounted for less than 50% of the total item ratings obtained from the inventory. To gain further insight into characteristics most closely associated with successful leaders while minimizing loss of information obtained from the Revised Descriptive index, I ranked all mean item ratings within each educational group. Table 5 shows the 15 items with the highest mean ratings out of 118 in rank order within group. Both non-leadership and entry level leadership students' mean rating of "leadership ability" ranked highest of all 118 descriptors as most characteristic of successful leaders. In contrast, the graduating leadership students' average rating of "leadership ability" was 4.15 (SD = .949), well below leadership graduating students' top-ranked characteristics. Five characteristics received mean ratings within the top 15 rankings across all three groups: inspiring, cooperative, loyal, sense of purpose, and trustworthy. These five items comprise characteristics primarily from the transformational and relationship-oriented dimensions. An additional six items received top 15 mean rankings among both the entry level and graduating leadership students: encouraging, enthusiastic, open-minded, shows appreciation, supportive, and understanding. These items are also from the transformational and relationship-oriented dimensions. While the two leadership education groups showed many common items in their top rankings, it is interesting that the entry level leadership students tended to have slightly lower mean ratings and larger standard deviations than the graduating leadership students in these top 15 rankings. In contrast to the leadership students, the non-leadership students had a greater

number of agentic and task-oriented items in their top 15 rankings. These included the following items: ambitious, competent, decisive, logical, and self-confident. Because of limitations in the reliability of single item ratings, I did not conduct tests to statistically compare differences between the mean individual characteristic ratings across groups.

Table 5
Means of Highest Rated Characteristics by Group

Non-Lead Leadership Characteristic	*M (SD)*	Entry Lead Leadership Characteristic	*M (SD)*	Grad Lead Leadership Characteristic	*M (SD)*
Leadership Ability	4.72 (.58)	Leadership Ability	4.56 (.77)	Competent	4.63 (.57)
Inspiring	4.69 (.59)	*Enthusiastic*	4.50 (.75)	*Shows Appreciation*	4.63 (.42)
Sense of Purpose	4.69 (.56)	**Trustworthy**	4.48 (.82)	**Trustworthy**	4.59 (.50)
Knowledgeable	4.67 (.47)	**Loyal**	4.45 (.82)	*Understanding*	4.59 (.57)
Trustworthy	4.67 (.59)	Consistent	4.44 (.74)	*Encouraging*	4.56 (.58)
Self-Confident	4.66 (.54)	**Cooperative**	4.44 (.72)	Good Listener	4.56 (.70)
Ambitious	4.55 (.73)	**Inspiring**	4.44 (.69)	**Inspiring**	4.56 (.64)
Competent	4.55 (.71)	*Encouraging*	4.43 (.79)	**Cooperative**	4.54 (.51)
Emotionally Stable	4.55 (.62)	*Supportive*	4.43 (.79)	**Loyal**	4.52 (.64)
Loyal	4.55 (.75)	*Understanding*	4.43 (.74)	*Supportive*	4.52 (.64)
Considers Others' Ideas	4.53 (.76)	*Open-Minded*	4.41 (.71)	Compassionate	4.48 (.58)
Intelligent	4.53 (.62)	*Shows Appreciation*	4.41 (.69)	Considers Others' Ideas	4.48 (.80)
Logical	4.53 (.59)	Ambitious	4.39 (.79)	*Enthusiastic*	4.48 (.58)
Cooperative	4.52 (.71)	**Sense of Purpose**	4.37 (.78)	*Open-Minded*	4.48 (.64)
Decisive	4.52 (1.01)	Sincere	4.37 (.76)	**Sense of Purpose**	4.48 (.70)

Note. Standard deviations are in parentheses. Bolded items received top 15 average ratings in all three group. Italicized items received top 15 average ratings in both entry level and graduating leadership student groups only.

Discussion

This study examined how undergraduate students conceptualize successful leaders. Overall, the three groups of undergraduate students had similar views on the importance of relational and transformational characteristics for successful leadership. As hypothesized, however, the results also revealed significant differences between the conceptualizations held by students not enrolled in leadership coursework and students enrolled in leadership coursework. Non-leadership students rated successful leaders significantly higher on agentic and task-oriented characteristics than did leadership students. They also rated successful leaders significantly lower on communal characteristics than did students graduating from a leadership program. The pattern of characteristics endorsed by non-leadership students aligns with traditional hierarchical views of leadership. This finding is consistent with previous research showing that undergraduate students tend to hold traditional views of leadership (Haber, 2012; Wielkiewicz, 2012). A closer look at item rankings reveals results that concur with this finding. The top-ranking mean item ratings of non-leadership students contained many agentic and task-oriented characteristics. In contrast, the top-ranking mean item ratings from entry level and graduating leadership students reflected a greater emphasis on relationship-oriented and transformational characteristics. These findings suggest that students in leadership programs conceptualize leadership in less traditional terms

than students in general.

Furthermore, they suggest that entry level leadership students are more similar to graduating leadership students than to non-leadership students in their conceptualizations of characteristics that are important for successful leadership.

While, contrary to expectations, results showed no significant differences between entry level leadership students and graduating leadership students on dimension score ratings, interesting patterns emerged when examining data at the item level. First, in both non-leadership students and entry level leadership students, the descriptor with the mean rating that ranked highest in terms of its association with successful leadership was "leadership ability." In contrast, in graduating leadership students, the mean rating of the descriptor "leadership ability" ranked much lower than other descriptors from the Revised Descriptive Index. Perhaps this finding reflects a difference between the groups on the extent to which they believe leadership characteristics can be learned. Non-leadership students and entry level leadership students may have a greater tendency to view leadership characteristics as innate abilities rather than learnable skills. Graduating leadership students may understand, as a result of their coursework, that characteristics associated with successful leadership involve learned patterns of behaviors. This difference is not surprising because the leadership education program in this study emphasized engagement in leadership activities with reflection and feedback in order to develop leadership skills. Second, while entry level leadership students and graduating leadership students had many of the same items ranked in the top 15, entry level students showed a pattern of slightly lower means and greater variability in scores than the graduating students. This suggests that graduating leadership students may have a more consistent view of characteristics important for successful leadership. This would be expected because the graduating students completed a program that is based heavily on one particular model of leadership that emphasizes social change. It is possible that the leadership education

program had the effect of verifying and strengthening perspectives about characteristics of successful leadership rather than producing a dramatic change in characterizations of successful leadership. Thus, although both entry-level and graduating students who enroll in leadership coursework ascribe characteristics to successful leaders that are similar and less traditionally agentic and task-oriented than non-leadership students, the results of this study suggest there may be important subtle differences in how entry level leadership students and graduating leadership students conceptualize successful leadership.

Strengths, Weaknesses and Directions for Future Research. The results of this research contribute to our understanding of student conceptualizations of leadership. While previous studies have generally focused on how students might view themselves as leaders, or how students in general interpret quality leadership, this study provides a more nuanced perspective. It examines conceptualizations of successful leaders held by three distinct groups of students. It is important for educators to understand differences between these groups in order to make informed judgments on how to adjust leadership education programs to better meet student needs and interests. Learning that entry level leadership students have similar views about the characteristics associated with successful leaders as graduating leadership students may prompt educators to consider adjusting the theoretical focus of the program or placing greater emphasis on leader behaviors and application. Learning that non-leadership students have more traditional views about attributes associated with successful leaders than students enrolling in leadership programs may motivate educators to consider how characteristics of these programs contribute to student self-selection into them as well as ways of reaching out to a broader range of students.

This study has multiple limitations. The sample of participants was small and not representative of the broader population. The sample of graduating leadership students, in particular, was notably smaller

than the other two groups. As a result, the study may have lacked sufficient power to reveal subtle differences between groups. In addition, across all groups, the majority of participants identified themselves as female. While statistical analyses showed no effect of participant gender, this finding may have been a result of insufficient power to detect gender differences because of the small sample of male participants. It is possible that female students may characterize successful leaders differently than male students, but the sample characteristics of this study masked the effect. Additionally, the sample of students came from a single midwestern university with one specific leadership education program. Characteristics that these participants associate with successful leadership may not generalize to a broader population. Also, the social change leadership program offered at this institution may attract a certain type of student with particular views about leadership that are not broadly held by undergraduate students in general. This type of program may not attract students with a more traditional view of leadership. Furthermore, the leadership program itself may have an educational impact that is unique to its content. For these reasons, further research is needed to examine the extent to which the findings from this study generalize to other populations and other programs of study.

Another limitation of this study lies in the measurement of the construct. This study assessed beliefs about successful leadership using the Revised Descriptive Index from the "think-manager-think-male" paradigm (Duehr & Bono, 2006; Schein, 1973, 1975). While this measure has been successfully applied to examining leader stereotypes, it encompasses a limited number of descriptors and places little emphasis on leader behaviors. It would be useful to assess student beliefs about behaviors displayed by successful leaders. Such an approach may reveal differences in entry level and graduating leadership students, particularly in a leadership education program that emphasizes action and application. Additionally, only a subset of items from the instrument formed dimension scores that were used to conduct statistical comparisons across groups. While the remaining data showed interesting patterns of results, further research would be needed to examine whether these results are statistically meaningful. Finally, the rating scale of the instrument contained a limited number of points. Perhaps a rating scale that allows for more differentiation in the importance ascribed to various characteristics for successful leadership may increase variability in scores and reveal differences that the present study was not able to detect.

Conclusion. This study shows that undergraduate students from different groups hold varied perspectives on characteristics associated with successful leadership. Educators should not assume that undergraduate students entering leadership education coursework represent undergraduate student perspectives in general. Research should explore whether perspectives about leadership affect participation in leadership education programs and implications of this self-selection. Research should also examine what types of curricula may be best suited for students who hold different characterizations of successful leadership. Educators need a better understanding of how varied types of programs impact beliefs and behaviors of students who enter the program with differing perspectives on leadership. Continued research in this area can provide insights that inform how we design leadership education programs. As stated by Rosch and Collier (2013), "the more educators can understand about the types of students who elect to participate within their courses, the better they will be able to help them learn" (p. 104).

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