

Transforming Future Air Force Leaders of Tomorrow

A Path to Authentic Transformational Leadership

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If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

—John Quincy Adams

Introduction

In the preceding quote by our sixth president, he managed to capture the essence of leadership in 19 words. Why has this concept of *leadership* become elusive to so

many? Leadership is a concept that has evolved over the course of humanity. Why are there so many theories? What is the best leadership model? For the past six years, the Squadron Officer School (SOS) at Maxwell AFB, Alabama has inculcated transformational leadership behaviors as a guiding light toward *authentic transformational leadership*. The focus of this article is to pinpoint the developed behaviors and leadership acumen of our SOS graduates today as measured through the Leadership Development Survey (LDS), a 40-item measure based on Mind Garden’s Multifactor Leadership Questionnaire (MLQ) that captures propensity scores on eight leadership behaviors. As an analytical tool, the LDS not only sheds new light on the leadership behavior preferences of today’s Air Force captains but also indicates, on an empirical basis, an optimal approach pattern for senior leaders—*how can senior leaders reach these captains and bring out their best in a common culture of leadership?* The following sections will describe the leadership philosophy that has become the foundation of the SOS curriculum and hopefully a leadership lexicon for future Air Force leaders.

The Full-Range Leadership Model

When we speak of the “full range of leadership,” we are actually referring to transformational and transactional leadership theories to include laissez-faire (LF), the nontransactional approach to leadership. As depicted in figure 1, these three styles of leadership and associated behaviors comprise the Full-Range Leadership Model (FRLM).

Laissez-Faire	Transactional		Transformational				
Hands-Off Leadership	Management by Exception (MBE)		Contingent Reward (CR)	Individual Consideration (IC)	Intellectual Stimulation (IS)	Inspirational Motivation (IM)	Idealized Influence (II)
	Passive	Active					

Figure 1. Full-Range Leadership Model. (adapted from Bernard M. Bass and Ronald E. Riggio, 2006.)¹

Originally, transformational leadership was first described in 1973 by James V. Downton. However, it was James MacGregor Burns who introduced this significant leadership approach in his classic text *Leadership*.² Burns attempted to link leadership and followership roles while making a distinction between transformational and transactional properties. Transactional leadership behaviors focused on the exchanges between leaders and followers as described in many earlier leadership models. For instance, leaders would offer incentives for performance to drive productivity; teachers would offer grades for completed assignments; or managers would reward employees for exceeding work goals. In contrast, a transformational approach seeks to engage a follower to not only foster a leader–follower relationship but raise the level of motivation and morality. A transformational leader is attentive to the needs and concerns of followers and strives to help them reach their potential. According to Bernard M. Bass, transformational and transactional leader-

ship approaches were not mutually exclusive and empirically documented to be positively correlated.³ Additionally, the transformational model is one of the current approaches to leadership today. In their 2001 study of articles published in *Leadership Quarterly*, Kevin B. Lowe and William L. Gardner discovered that one-third of leadership research focused on the transformational or charismatic perspective.⁴

The literature suggests that individual traits reflecting the FRLM can be measured using the MLQ. This is a scientifically validated assessment mechanism for determining individuals' development levels in each of the FRLM behaviors depicted above. Unfortunately, this survey is expensive. Thus, the Air University's (AU) SOS developed an assessment measurement based on the MLQ—the LDS—to use as a military-specific leadership assessment instrument and growth tool (as approved by the author of the MLQ and the senior publisher, Mind Garden Inc.).⁵ This survey has been used for developing SOS students since 2013. The vision of the LDS is to provide a metric for resident students initially and during the last week of their course to illustrate personal leadership growth and provide a snapshot for future leadership curriculum development. Bass emphasized a “full range leadership” approach that not only included these two styles but incorporated an avoidant LF style as well.⁶ In addition to these three styles of leadership, Bruce J. Avolio and Bass identified relevant behaviors associated with each leadership style.⁷ To begin our discussion of the FRLM styles and behaviors, we will start with the nontransactional behavior LF leadership.

Laissez-Faire Leadership

The French phrase *laissez-faire* or “hands-off” leadership, in this case, describes a leader who abdicates responsibility, delays decisions, is not interested in his or her followers' needs or in providing feedback, and does not develop followers.⁸ This type of leader is not engaged with subordinates and avoids taking a stand on any organizational issues. Further, the LF leader is often absent from work meetings and other related obligations and may avoid the daily work responsibilities altogether.⁹ Eventually, followers become frustrated leading to dissatisfaction with their leader, job, and organization.¹⁰ In the military environment, this dissatisfaction could manifest into a variety of reactions ranging from substandard performance to separation. The next section describes a requisite style of leadership for our dynamic military environment; transactional leadership.

Transactional Leadership

Transactional leadership seeks to maintain organizational stability through regular social exchanges leading to goal achievement for both leaders and their followers. Burns described transactional leadership as an exchange relationship among leader and followers to satisfy self-interests. Building on this previous work, Bass included two relevant components; contingent reward (CR) and management by exception (MBE). Further, he divided MBE into active and passive approaches and included LF as an avoidant leadership behavior.¹¹ The following sections describe these behaviors in more detail.

Contingent Reward

CR is a *constructive transaction* between leaders and followers. It is constructive because the leader sets expectations for followers that describe what must be achieved to meet expected standards of performance. This action is also constructive since it utilizes rewards to reinforce positive performance. The CR approach has been called an effective and powerful method to motivate followers by creating consistent expectations between leaders and followers. Typically, CR is transactional when the reward is extrinsic or material such as a bonus or promotion. When the reward is psychological such as praise, this becomes more of a transformational approach.¹²

Management by Exception

Unlike CR, MBE is labeled as a *corrective transaction* and is usually not as effective as CR or transformational behaviors, but it is necessary in high-risk or life-threatening situations.¹³ Further, MBE may take two forms; active (MBE-A) or passive (MBE-P). During the active approach, leaders *actively* monitor followers for deviations from standards in the form of mistakes or errors and take corrective action as necessary. During MBE-P or the passive approach, leaders *passively* take corrective action only when they feel they must get involved, which is usually too late. Transactional leaders are vital to the military mission, but as we will learn in the next section, *transformational leadership* has been empirically demonstrated as the most effective form of leadership.

Transformational Leadership

In contrast with transactional leadership, transformational leadership involves creating personal relationships with followers that raises their level of motivation and morality. A transformational leader is attentive to followers' needs and strives to transform followers into leaders.¹⁴ The following sections describe each of the transformational behaviors.

Idealized Influence

Transformational leaders exhibiting *idealized influence* (II) project themselves as positive role models for followers to emulate. Typically, these leaders are respected, admired, and trusted completely. Followers identify with, not only the leader, but also with their mission or cause and often emulate the leader's behaviors and actions. In true idealized fashion, this type of leader addresses the needs of followers over personal needs. Principles and high standards of ethical and moral conduct are upheld by this leader who is consistently counted on to "do the right thing."¹⁵ Mahatma Gandhi is probably the most celebrated idealized influence example in history. Incorporating the II approach embraces the tenets of the "Air Force Core Values,"¹⁶ creating a paragon for ethical leadership.

Inspirational Motivation

There are times when leaders are required to enhance team spirit, provide meaning, and challenge their followers' work. Through enthusiasm and optimism, lead-

ers may inspire and motivate their followers to achieve what they never thought was possible. A powerful inspirational leader may motivate followers by what they say, by their actions, and, optimally, by both.¹⁷ Air Force leaders will inevitably find opportunities that require inspiring followers to accomplish challenging goals, which is a crucial leadership skill.

Intellectual Stimulation

Leaders who foster creativity and innovation in their followers while supporting new approaches to overcome organizational challenges exemplify the intellectual stimulation (IS) behavior. This approach encourages followers to develop unique ways to carefully solve problems or complex issues within the organization.¹⁸ Further, leaders leveraging IS stimulate members to become more creative by questioning assumptions, reframing problems, and approaching old situations or problems with new methodologies. You may need to collaborate with colleagues or peers for assistance, take courses in creativity or innovation, and do whatever is necessary to remove any obstacles for your followers.

Individual Consideration

Probably the most personal leadership behavior that you can offer a follower day-to-day is *individual consideration* (IC). A typical military leader is distracted, but utilizing the IC behavior is not only a powerful transformational instrument, but also a reminder to all of us what it is to be human! In addition to active listening and two-way communication, a leader leveraging IC considers each individual's needs for growth and achievement by assuming the role of teacher, coach, mentor, facilitator, confidant, and counselor.¹⁹ Using this approach allows followers to feel valued, encouraging not only professional, but also personal growth. When leaders display these actions with followers, members become more amenable to expressing individuality.

However, using a full range of leadership with followers is not enough to truly transform your followers into future authentic leaders. In early 2016, SOS introduced an additional component of leadership development necessary for the continuity of leadership sustainment: virtues and character strengths.

Achieving Authentic Transformational Leadership

Bill George posited that authentic leaders develop genuine relationships while creating trust with their followers. Further, George claimed that when followers trust their leaders, they can perform at higher levels while being empowered to lead. *Authentic transformational leadership* (ATL), as described by John J. Sosik, is the integration of the transformational behaviors and associated character strengths categorized in Christopher Peterson and Martin E. Seligman's seminal research cited in hundreds of behavioral articles today.²⁰ Moreover, when our character strengths are aligned with our transformational leadership behaviors, and they are considered to be virtuous, such integration leads to authentic transformational leadership.²¹ Virtues are the core characteristics universally valued by moral philosophers and religious thinkers as the foundation for good character and include: wisdom and

knowledge, courage, humanity, justice, temperance, and transcendence. Character strengths are the positive traits for displaying these virtues illustrated in figure 2 below:²²

Wisdom	Courage	Humanity
Creativity Curiosity Love of learning Judgment Perspective	Bravery Perseverance Honesty Zest	Love Kindness Social intelligence
Justice	Temperance	Transcendence
Teamwork Fairness Leadership	Forgiveness Humility Prudence Self-regulation	Appreciation of Beauty and Excellence Gratitude Hope Humor Spirituality

Figure 2. Virtues and character strengths. (adapted from Peterson and Seligman, 2004)²³

Wisdom and Knowledge

When one exercises good judgment and the appropriate use of intelligence, this is a virtue referred to as wisdom and knowledge. There are five associated character strengths that fall under this virtue: creativity, curiosity, love-of-learning, judgment, and perspective.²⁴ *Creativity* is typically characterized by someone's original or ingenious abilities displayed by the way he or she thinks, talks, or performs. *Curiosity* describes someone who may have many interests, seeks novel ideas, or is open to new experiences. Those who are motivated by an intrinsic desire to learn new things are exercising a *love of learning*. By using *judgment*, one will consider alternative viewpoints, examine all evidence, and typically will not jump to rash conclusions without weighing all the facts. *Perspective* is the ability to consider all facets of a situation and integrate these views into one understandable solution for all to consider. Perspective is one of the key character strengths that can help to empathize with followers' needs.²⁵

Courage

Unlike all other virtues, courage has been a fundamental part of the military throughout history. There are four related character strengths that reflect this virtue: bravery, perseverance, honesty, and zest. When someone speaks up for what is right in conflict with opposition or acts on convictions, this is an example of *bravery*. Courageous people learn to *persevere* despite challenges, obstacles, or setbacks. When one remains true to themselves and acts with *honesty* and authenticity, he or she has integrity. When we say that someone has vitality or displays good physical and mental well-being throughout challenges in their lives, we call this *zest*.²⁶ Military history is replete with stories of heroes overcoming harsh physical conditions, battle wounds, and mental warfare to meet their missions.

Humanity

Humanity often describes “strengths of others,” or more importantly interpersonal strengths that we use to protect others in our work or personal lives. There are three character strengths associated with humanity: love, kindness, and social intelligence. Peterson and Seligman refer to *love* as caring or valuing close relationships with others, particularly when sharing or caring are reciprocated. There are times when compassion and understanding are needed to comfort followers during a crisis, a loss of a family member, or during other stressful times in their lives. Valuing humanity while demonstrating generosity, nurturance, and compassion describes *kindness*. When we recognize and control our emotions and engage in positive interactions with others, we are exercising the strength of *social intelligence*. Social and emotional intelligence have been linked with better life decisions, effective social functioning, more adaptive outcomes, and lower levels of aggression.²⁷

Justice

Fostering a sense of fairness and righteousness describes the virtue of justice. There are three character strengths within this virtue: fairness, leadership, and teamwork. In many military situations, we must work well with other group or team members, display loyalty, and do our part of the workload to ensure harmony. Ensuring that we treat others the same without personal bias or preference defines *fairness*. This strength has been linked to a solid moral identity helping to foster trust among others. Peterson and Seligman describe a leader as someone who not only encourages a group to accomplish a goal but also maintains good relations among the group. According to these authors, then, the character strength of *leadership* is distinguished from the larger topic of leadership as the ability of a group member to push the group to task achievement while strengthening bonds of togetherness and trust. Finally, when we demonstrate a sense of loyalty, social responsibility, and citizenship, we are exercising *teamwork*.²⁸

Temperance

Temperance describes the ability to exercise self-control and consider boundaries and limitations on personal desires and aspirations. There are four character strengths associated with this virtue: forgiveness, humility, prudence, and self-regulation. A person who exercises *forgiveness* and mercy avoids the human impulse to become vengeful in certain situations. Additionally, utilizing forgiveness at the appropriate times may not only restore positive emotions, moods, and attitudes, it may also reduce anxiety, anger, and depression. *Humility* involves remaining humble during one's achievements and not seeking the spotlight, or allowing one's performance to speak for itself. People exhibiting *prudence* are generally logical decision makers who make careful, thoughtful choices. *Self-regulation* and control describes the foundation of temperance as it relates to one's discipline to regulate appetites and emotions. Those leaders who possess a high degree of self-control typically inspire and build better relationships with their followers based on trust, fairness, and consistency.²⁹

Transcendence

Transcendence, sometimes called “strengths of the spirit,” provides meaning to one’s life by making connections to the larger universe or looking beyond oneself and toward relations with others. There are five related character strengths associated with this virtue: appreciation of beauty or excellence, gratitude, hope, humor, and spirituality. Transcendent individuals learn to *appreciate beauty or excellence* in the skilled performance of others. Additionally, transcendent individuals are thankful for the good things in their lives and take the time to thank those who have had a positive influence, exercising *gratitude*. Looking to the future with a positive vision or optimistic outlook describes *hope*. Typically, hopeful individuals are high achievers in academics, athletics, politics, and other industries as they have a positive vision for the future and will set loftier goals. Transcendents often use *humor* to, not only encourage creativity, but also to relieve stressful situations. *Spirituality* is associated with possessing faith in something greater than themselves, or having beliefs about a higher purpose, meaning of life, or where one fits in the larger scheme of things.³⁰

Methodology

Those who study leadership often focus on leadership styles and behaviors as they relate to accomplishing the mission or meeting specific timelines or goals. In our dynamic and complex military environment, we often fail to consider the human aspects of leadership and followership. Utilizing the profound tenets of Peterson and Seligman’s research and the transformational applications of Sosik, we can make more meaningful connections with our superiors, peers, and followers. This section provides an overview of our SOS full-range leadership study of academic years (AY) 2014 and 2015.

Participants for the present research were military leaders (with other categories) in the US Air Force attending an intensive leadership course (table 1). The participants consisted of: 92 percent active duty Air Force captains, 2 percent DOD civilians, 1 percent international military officers, 3 percent Air National Guard members, and 2 percent Air Force reservists.³¹ Participants from six resident SOS flights (classes) in AY 2014 (*N* = 4,575) and five classes in AY 2015 (*N* = 3,065) provided pre- and postcourse ratings on the LDS.

Table 1. Sample size responses

AY	Pre	Post	Total
AY14	3,213	1,362	4,575
AY15	2,154	911	3,065
Total	5,367	2,273	7,640

Of these, for the subsequent analyses, 1,358 and 910 participants provided post-course responses for AY14 and AY15, respectively. One reason for the lower post-course response rate may be the timing of the survey administration. The post-course administration of the LDS occurs in the last week of the course a few days before graduation. Further, the LDS is not a graded event, although participation is

encouraged, it is not enforced. Taken together, these factors may lead to decreased interest in responding.

Measure

Leader Development Survey. The LDS is a 40-item measure developed by Dr. Fil Arenas, SOC, Maxwell AFB, based on Mind Garden's MLQ to measure propensity scores on eight leadership behavior.³² It was modified for the current research for use with a military sample. The report provides individual scores on eight subscales (each consisting of five items) reflecting different leadership style/behaviors: LF, MBE-A, MBE-P, CR, II, IM, IS, and IC.³³ Participants responded to each item on a five-point Likert scale: (1 = Never; 5 = Always).

The "propensity scores" were based on the review of validated instruments that highlighted tendencies toward a particular style of leadership, while further illustrating specific behavior patterns.³⁴ The vision of the LDS is to provide a metric for SOS students initially (pretest) and during the last week (posttest) of their course to illustrate personal leadership growth and provide a model for future leadership development.

Procedure

The LDS was administered online as part of the SOS course curriculum. The link to the pre-LDS measure is provided during week one of the course. Students have approximately 72 hours to complete the premeasure. The link to the post-LDS measure is provided during the final week of the course, and students have approximately 72 hours to complete the postmeasure. For AY14, the course was conducted during an eight-week timeframe. For AY15, the course was conducted during a five-week timeframe. The class results are discussed by the instructor at the end of the course to apply the course content and allow the participants to reflect on their leadership behaviors and development.

Results

The takeaway from this section is that the independent variables of AY, prepost course responses, and gender showed enough stability to support inferential judgment, and additional analysis revealed the results showed strong consistency between AY14 and AY15, indicating that the change in course length did not weaken the data. The results from a multivariate analysis of variance, examining the mean level differences of AY, prepost course responses, and gender on the LDS subscales indicated significant main effects for all three predictors.³⁵ The results also indicated that there were no interactive effects on the LDS subscales.³⁶ Although there was a significant main effect for AY (eight versus five weeks), the results indicated that there was not a gender*AY effect nor a prepost course responses*AY effect, suggesting that the difference in course timeframes did not affect the results for the study variables of interest. Finally, the gender* prepost course responses effect also was not significant, indicating that male and female officers did not differ significantly in their rates of change during the course.

Given the significance of the omnibus test, the univariate effects of prepost course responses on the LDS measures were examined using a corrected Bonferroni method ($p = .05/8$), which ensures that links across the data were not merely coincidental. The results indicated a significant effect for prepost course responses on LF [$F(1, 7,582) = 22.17, p < .001, \eta^2_{partial} = .003$], MBEA [$F(1, 7,582) = 10.04, p = .002, \eta^2_{partial} = .001$], IM [$F(1, 7,582) = 23.13, p < .001, \eta^2_{partial} = .003$], and IS [$F(1, 7,582) = 12.54, p < .001, \eta^2_{partial} = .002$] dimensions (table 2). Table 2 illustrates that the postcourse means were higher than the precourse means for the LDS responses except for the LF subscale, which was expected. The effect size estimates both for the multivariate effects and for practical differences between the means (Cohen's d) were small.³⁷

Table 2. Summary of means and standard deviations on the LDS subscales for the study variables

LDS Subscales	Pre-Post Responses			Gender			AY		
	Pre ($n=5,322$) M(SD)	Post ($n=2,268$) M(SD)	Cohen's d	Male ($n=6,113$) M(SD)	Female ($n=1,477$) M(SD)	Cohen's d	8-week ($n=4,536$) M(SD)	5-week ($n=3,054$) M(SD)	Cohen's d
LF	1.83(.51)*	1.75(.53)	.16	1.80(.52)	1.84(.52)		1.80(.52)	1.81(.52)	
MBE-A	3.94(.53)*	4.00(.55)	.11	3.95(.54)*	3.99(.52)	.07	4.08(.54)*	3.78(.48)	.58
MBE-P	2.56(.62)	2.54(.63)		2.56(.62)*	2.49(.63)	.11	2.57(.63)*	2.52(.63)	.08
CR	4.28(.51)	4.29(.54)		4.27(.51)*	4.35(.56)	.15	4.28(.52)	4.29(.51)	
II	4.44(.41)	4.49(.44)		4.45(.42)	4.46(.39)		4.45(.42)	4.46(.42)	
IM	4.26(.53)*	4.35(.53)	.17	4.28(.53)	4.30(.51)		4.28(.53)	4.30(.53)	
IS	4.40(.62)*	4.48(.56)	.13	4.42(.61)	4.44(.55)		4.41(.62)	4.43(.57)	
IC	4.30(.53)	4.37(.57)		4.35(.59)*	4.46(.48)	.19	4.30(.57)*	4.35(.51)	.09

* $p < .006 (.05/8)$

Due to the significant main effect for gender on the average LDS scores (combined prepost scores), the univariate effects of gender on the LDS subscales were examined, using a corrected Bonferroni method ($p = .05/8$). The results indicated a significant effect for gender on the MBE-A [$F(1, 7,582) = 8.06, p = .005, \eta^2_{partial} = .001$], MBE-P [$F(1, 7,582) = 13.49, p < .001, \eta^2_{partial} = .002$], CR [$F(1, 7,582) = 15.62, p < .001, \eta^2_{partial} = .002$], and IC [$F(1, 7,582) = 90.81, p < .001, \eta^2_{partial} = .01$]. Table 2 shows that females were higher on the MBE-A, CR, and IC scales, whereas males were higher on the MBE-P scale.

Building a Common Culture of Leadership

Why has the SOS focused on transformational leadership behaviors? What if this work has had the effect of creating an incipient common culture of leadership? To-

day, the tenets of full-range leadership have reached multiple AU curricula beyond the SOS to include the: US Air Force Academy, Officer Training School, Senior NCO Academy, First Sergeant Academy, International Officer School, and graduate-level electives at Air Command and Staff College and Air War College. What if this culture can provide a foundation for future leadership effectiveness? The authors feel that leveraging these salient leadership principles across our culture will generate superior leaders.

The English naval historian Julian Corbett wrote his classic text *Principles of Maritime Strategy* in 1911. He opens the book with a call for a common professional warfighting culture that would thrive due to shared understandings of concepts from a “common plane of thought.”³⁸ Corbett’s vision of a successful professional common culture is important enough to quote at length:

It is a process by which we coordinate our ideas, define the meaning of the words we use, grasp the difference between essential and unessential factors, and fix and expose the fundamental data on which everyone is agreed. In this way we prepare the apparatus of practical discussion; we secure the means of arranging the factors in manageable shape, and of deducing from them with precision and rapidity a practical course of action. Without such an apparatus no two men can even think on the same line; much less can they ever hope to detach the real point of difference that divides them and isolate it for quiet solution.³⁹

At nearly a century old, leadership studies as a discipline is relatively young—all the more reason for building up a common culture of leadership. Such a culture can become the primary means of transmitting organizational values and models of exemplary leadership, a necessary feature of the indispensable relationship between senior and junior leaders.

However, what would constitute such a common culture? According to philosopher Alasdair McIntyre, such cultures “should possess a language [with] shared rules.”⁴⁰ The language of transformational leadership behaviors offers not only a useful and empirically validated lens for approaching leadership growth—but also a baseline language of leadership that satisfies both Corbett’s and McIntyre’s requirements for a thriving common culture. The SOS has already begun this work by teaching the terms and concepts of transformational leadership. However, this is only a start. A professional military education (PME) program of several weeks can only do so much in terms of internalizing values and patterns of behavior. Company grade officers will continue to be primarily shaped in the field by the expectations of their commanders and supervisors. Therefore, the stage is set for senior leaders to use the tools of transformational leadership to complete this learning, in the crucible of demanding jobs, military operations, and superior supervision. With a set of common conceptions, standards and expectations, goals may be clearer and easier to set and describe, and senior leaders may find extra time back in their schedules.

While the benefits of speaking the same language of leadership may be apparent in a general sense—facilitating clear communication and agreement on leadership goals—the SOS students in their responses to the LDS instrument demonstrated consistent patterns that the authors now turn to. The effort here is to reveal the specific contours of the fledgling common culture of leadership that the SOS indoctrinated USAF captains into, and that senior leaders may want to continue to build!

The Transformational Leadership Culture of Today's Captains

What concepts about leadership resonate for today's younger officers? More importantly, what qualities and aims do these officers possess that we can recognize and cultivate, empowering them to grow into mature, disciplined, selfless, and dedicated leaders? The research collected at the SOS covers the responses of thousands of company grade officers who have passed through Maxwell AFB. Based on the 40-item LDS, inferences can be made about the individual preferences of the students regarding leadership behaviors and the attributes of a burgeoning "common culture" of leadership. The authors propose three findings from an analysis of the data:

- **Air Force captains, if somewhat naturally inclined to practice transformational leadership, require education and reinforcement on its language and behaviors.** The study findings suggest that a learning process occurred during the course that changed the participants' perceptions of optimal leadership. Mean scores increased on all four transformational behaviors (II, IM, IS, and IC) and the two transactional behaviors (MBE-A and CR; one was significantly higher) that, taken together, require consistency and follow-through went up. On the other hand, the means on the two behaviors that downplay these qualities (MBE-P and LF; one was significantly lower) went down. The data also suggest a larger lesson for commanders and supervisors, to continue the work done at formal PME to good effect. If the course succeeded in inviting younger officers to internalize the terms and concepts of transformational leadership, line supervisors and senior leaders can encourage these officers to persist in the process of internalization, first and foremost, simply by using its language which SOS graduates have already learned. The statistically significant prepost changes in IM, IS, MBE-A and LF indicate that education on FRLM language may have the largest impact on optimizing these four behaviors. Conversely, younger leaders relying substantially on intuition and experience will have less beneficial impact as leaders in these areas without intervention.
- **Transformational leadership language and behaviors optimize Air Force captains' focus on the achievement of standards and use of other transactional leadership behaviors.** Prepost comparative results showed increases in the MBE-A subscale for both male and female officers. Interestingly, the results also demonstrated that, overall, these behaviors were more strongly endorsed by female officers. These findings suggest that indoctrination in the language of *transformational* leadership also reflects an increased attention to the importance of standards, which is a *transactional* behavior. Moreover, these results were obtained despite the precourse inclination for participants to value the four transformational behaviors over the transactional behaviors (see the mean scores in table 2), and despite the content's articulation that tends to value the transformational behaviors as a more ideal set of leader behaviors than transactional behaviors. Therefore, a course which inculcates transformational leadership can lead students to value self-

less regard for others *and* adherence to standards, producing officers who wish to prioritize accountability in their leadership.

- **Transformational and transactional leadership language and behaviors may maximize the use of behaviors in their relation to the virtue of humanity and in ways specific to qualities of male and female officers.**

According to the combined pre and post scores (the second column of table 2), female officers scored statistically significantly higher than males on the IC, MBE-A and CR subscales and comparatively lower on the MBE-P subscale. Based on these results, which previous research has extensively validated,⁴¹ female officers emphasized the importance of higher expressions of IC, MBE-A and CR more than their male counterparts as ideal leader behaviors. The implication that male AF captains tend to favor a more disengaged and passive leadership style than female captains is important and is corroborated in many studies along broader demographic lines.⁴²

The aspect of this finding perhaps most significant to senior AF leaders is that male officers may be less inclined without intervention to individualize their leadership approaches to specific followers—some, but certainly not all, followers respond well to a more disengaged style. Research, curriculum, and senior leader intervention that emphasizes the importance of not only IC, but also of the high six virtues and humanity, in particular, will likely achieve important effects for both male and female officers. At the same time, males will be afforded more opportunities to learn a more individualized form of leadership. The authors recommend this as an important line of future research.

The results also revealed that, although not statistically significant, female officers showed a prepost increase in emphasis on accountability [MBE-A; precourse *Mean* = 3.98(*SD* = .51); postcourse *Mean* = 4.00(*SD* = .54)] and a prepost reduction in CR [precourse *Mean* = 4.36(*SD* = .56); postcourse *Mean* = 4.31(*SD* = .56)]. Male officers showed an increase in their MBE-A [precourse *Mean* = 3.93(*SD* = .54); postcourse *Mean* = 4.00(*SD* = .55)] and CR [precourse *Mean* = 4.26(*SD* = .49); postcourse *Mean* = 4.29(*SD* = .54)] scores. Bass' identification of "a transformational component" within CR⁴³ helps to account for the gender differences on this subscale. Male officers may have learned from the course that CR is an important aspect of leader-follower dyads, and with their inherently lower scores on the transformational behaviors, higher CR can effectively bolster a transformational leadership style. Conversely, female officers may have concluded that by lowering their CR behaviors they would enhance their already effective use of the transformational behaviors. Overall, female officers reported somewhat higher scores on all four transformational behaviors (although only IC was significantly higher). It is important to note that the nonsignificance of rates of prepost change according to gender may be due to ceiling effects, since the pretest scores for both male and female officers were very high, limiting the potential rates of change throughout the course. More research is required to examine the degree to which gender affects the leader behaviors that are elicited and the implications for these differences on how transformational leadership is taught in PME. The language of transformational leadership can raise younger officers to higher levels of selflessness and individualized attention to fol-

lowers, and in ways selectively responsive to the empirically-validated differences between male and female leaders.

Summary

This study proposed three major findings. First, Air Force captains' perceptions of leadership and of the priorities of leaders changed due to inculcation of a common leadership model and its associated language, reflecting greater emphasis on consistency and interaction. Second, Air Force captains valued an adherence to standards (transactional) while given opportunities for improved leader–follower dyads (transformational) during their PME. Third, exposure to the model and its language produced inclinations in the captains toward a more engaged, individualized, and humanized version of leadership, and in ways responsive to observed gender differences.

Although early awareness is a key step to establish a leadership lexicon for tactical, operational, and strategic leadership development, further research should connect data points at these career levels to measure leadership tendencies over time to adjust future topical concentrations at the PME levels. In the meantime, many applications of the content may be attractive to today's leaders. Operationally, senior leaders have the option of incorporating the behaviors in their models of supervision, evaluation, and feedback. Relevant concepts, properly used, have the benefit of condensing and simplifying communication and mentoring on leadership performance. Finally, PME designers will have opportunities to investigate the performance of their curricula for desired outcomes according to anticipated course goals. 🌟

Notes

1. Bernard M. Bass and Ronald E. Riggio, "Transformational Leadership," (presentation, Mahwah, NJ: Lawrence Erlbaum Associates, Inc., 2006), 3–9.
2. Peter G. Northouse, *Leadership: Theory and Practice* (Thousand Oaks, CA: Sage Publications, Inc., 2007), 15.
3. Bernard M. Bass, *The Bass Handbook of Leadership: Theory, Research & Managerial Applications* (New York: Free Press, 2008), 618–19.
4. Northouse, *Leadership*, 185.
5. Reliability and validity determinations of the Leadership Development Survey (LDS) were based on LDS scale alphas such as those reported in the Methodology section and on the consistently close results of the LDS scales compared to the Multifactor Leadership Questionnaire (MLQ) in more than three years of reporting.
6. Bass and Riggio, "Transformational Leadership," 7.
7. Bruce J. Avolio and Bernard M. Bass, *Developing Potential Across a Full Range of Leadership: Cases on Transactional and Transformational Leadership* (New York: Psychology Press, 2002), 2–4.
8. Northouse, *Leadership*, 196.
9. John J. Sosik and Don I. Jung, *Full Range Leadership Development: Pathways for People, Profit, and Planet* (New York: Psychology Press, 2010), 272.
10. *Ibid.*, 272–73.
11. Robert N. Lussier and Christopher F. Achua, *Leadership: Theory, Application, Skill Development* (Canada: Thomson, South-Western, 2007), 623.
12. Bass and Riggio, *Transformational Leadership*, 8.
13. Bruce J. Avolio, *Full Range Leadership Development* (Thousand Oaks, CA: SAGE Publications, Inc., 2011), 64.
14. Avolio and Bass, *Developing Potential*, 1.

15. Avolio, *Full Range Leadership*, 60.
16. Curtis E. LeMay Center for Doctrine Development and Education, "The Air Force Core Values," in *Volume II, Leadership*, 4 November 2011, 5, <https://doctrine.af.mil/download.jsp?filename=Volume-2-Leadership.pdf>.
17. *Ibid.*, 45.
18. Northouse, *Leadership*, 193.
19. Sosik and Jung, *Full Range Leadership*, 18.
20. VIA Institute on Character website, "The VIA Survey," 22 December 2016, <http://www.viacharacter.org>.
21. John J. Sosik, *Leading with Character: Stories of Valor and Virtue and the Principles They Teach*, 2nd ed. (Charlotte, NC: Information Age Publishing Inc., 2015), 45.
22. The constellation of six virtues in figure 2 is the product of Peterson and Seligman's comprehensive review of the relevant literature in their book *Character Strengths and Virtues: Handbook and Classification*, (New York: Oxford University Press). These virtues also reflect Aristotle's "Doctrine of the Mean;" and "Strengths of Character and Well-Being," *Journal of Social and Clinical Psychology* 23, no. 5, 607. Each virtue is a medium between two extremes, for example, courage sits between recklessness and cowardice.
23. Christopher Peterson and Martin Seligman, *Character Strengths and Virtues: Handbook and Classification* (New York: Oxford University Press, 2004), 56.
24. Peterson and Seligman, *Character Strengths*, 29.
25. Sosik, *Leading with Character*, 53–56.
26. *Ibid.*, 56–58.
27. *Ibid.*, 58–61.
28. *Ibid.*, 61–62.
29. *Ibid.*, 62–65.
30. *Ibid.*, 65–68.
31. These demographics were obtained from the first year of data in which the LDS was administered (AY14 data).
32. Survey items are adapted from the Multifactor Leadership Questionnaire copyright © 1995 by Bernard Bass and Bruce J. Avolio. All rights reserved. Published by Mind Garden, Inc. www.mindgarden.com.
33. Cronbach alpha reliability estimates were obtained from the AY14 precourse participant responses and are as follows: LF, alpha = .59, MBE–A, alpha = .70, MBE–P, alpha = .66, CR, alpha = .58, II, alpha = .60, IM, alpha = .74, IS, alpha = .67, and IC, alpha = .53.
34. Coordination with Mind Garden Inc., regarding the basis of the LDS on the MLQ scales. Permission was granted from the senior publisher on 15 July 2013 to add the following citation to the LDS: "Survey items are adapted from the Multifactor Leadership Questionnaire copyright © 1995 by Bernard Bass and Bruce J. Avolio. All rights reserved. Published Mind Garden, Inc. www.mindgarden.com."
35. MANOVA results are as follows: [AY (Wilks' $\Lambda = .93$, $F(8, 7,575) = 70.91$, $p < .01$, $\eta^2_{\text{partial}} = .07$); prepost course responses (Wilks' $\Lambda = .99$, $F(8, 7,575) = 6.28$, $p < .01$, $\eta^2_{\text{partial}} = .01$); gender (Wilks' $\Lambda = .98$, $F(8, 7,575) = 21.44$, $p < .01$, $\eta^2_{\text{partial}} = .02$)].
36. Wilks' lambda, F and p statistics for the three relevant variable interaction effects are as follows: gender*AY effect (Wilks' $\Lambda = .999$, $F(8, 7,575) = 1.04$, $p = .40$, ns, $\eta^2_{\text{partial}} = .001$); prepost course responses*AY effect (Wilks' $\Lambda = 1.00$, $F(8, 7,575) = .41$, $p = .91$, ns, $\eta^2_{\text{partial}} = .00$); gender*prepost course responses effect (Wilks' $\Lambda = 1.00$, $F(8, 7,575) = 1.24$, $p = .27$, ns, $\eta^2_{\text{partial}} = .00$).
37. Cohen's d provides an estimate of the magnitude of the effect or how practical the mean difference is (Small effect $d = .2$ to $.5$; Medium effect $d = .5$ to $.8$; Large effect $d = .8$ and above).
38. Julian S. Corbett, *Principles of Maritime Strategy* (Mineola, NY: Dover Publications, 2004), 5.
39. *Ibid.*, 4–5.
40. Alasdair McIntyre, *A Short History of Ethics* (Notre Dame, IN: University of Notre Dame Press, 1998), 77.
41. Bass, *Bass Handbook*, 922.
42. *Ibid.*, 923.
43. *Ibid.*, 922.



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