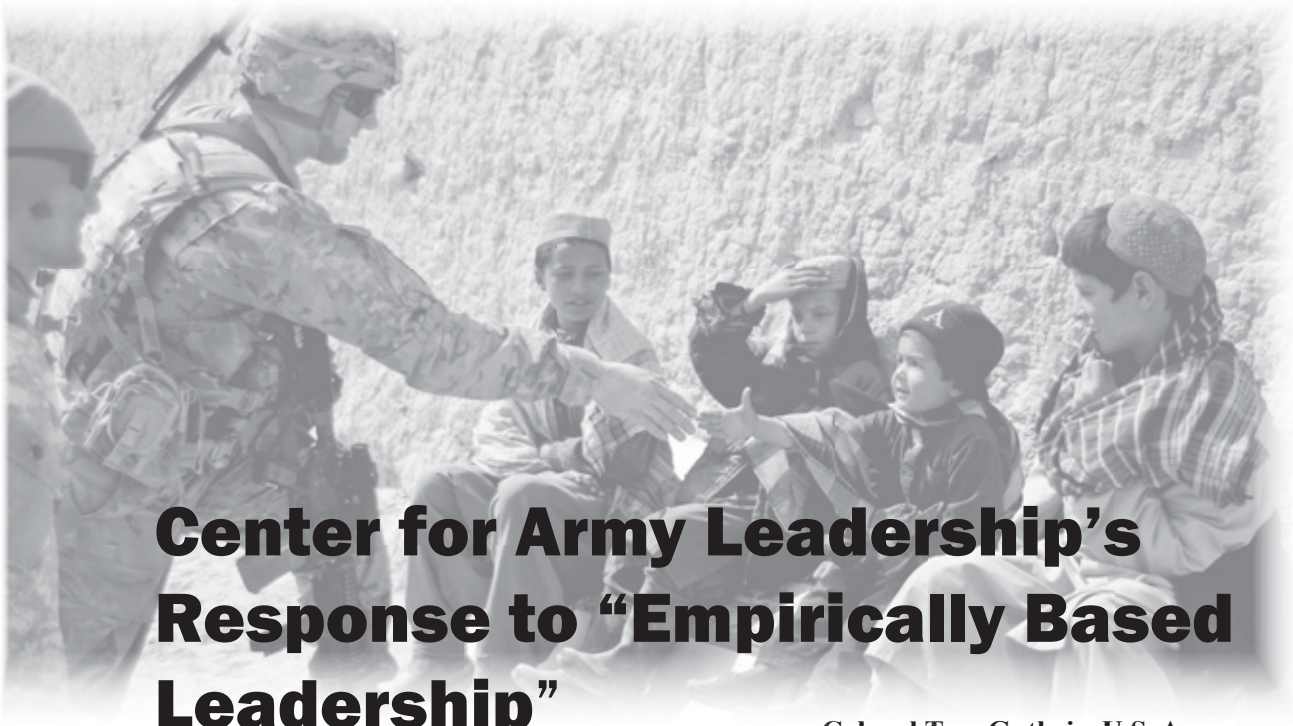

Center for Army Leadership's Response to "Empirically Based Leadership"

Colonel Tom Guthrie, U.S. Army

THE CENTER FOR ARMY LEADERSHIP commends Major Sean McDonald for winning the 2012 Douglas MacArthur Military Leadership Writing award for his article, "Empirically Based Leadership: Integrating the Science of Psychology in Building a Better Leadership Model," which appears in this issue of *Military Review*. However, his conclusion that the Leader Requirements Model (LRM) found in Field Manual 6-22, *Army Leadership,* was not developed based on scientific research and leadership theory is inaccurate, and it has the potential to mislead *Military Review* readers and the Army as a whole.

That during his time at Fort Leavenworth, Major McDonald did not take advantage of his close proximity to the very researchers who developed and validated the leadership doctrine of FM 6-22 is unfortunate. Had he contacted us, we would have gladly discussed the strong research and theoretical foundation of the LRM and could have helped him avoid making incorrect assumptions. We often help students understand the model and discuss topics that would extend the Army's understanding of leadership.

The Leader Requirements Model

The following discussion addresses the assertions and revisions McDonald proposed and provides clarification of the research foundation and development of the Army's LRM. The response addresses these areas:

● *Evidence*. The Leadership Requirements Model was extensively developed from research and an expert panel of leaders over a several-year effort. It went through the scrutiny of scientific validation and multiple reviews by senior leaders and Army-wide staffing. It continues to undergo empirical validation.

● *Redundancy*. The constructs proposed by McDonald already relate conceptually, and often literally, to constructs included in the Leadership Requirements Model. Evidence for the value of any single leadership construct identified in research articles may already be accounted for by another construct contained in the LRM.

Colonel Tom Guthrie, U.S. Army, is the director of the Center for Army Leadership at Fort Leavenworth, KS.

PHOTO: U.S. Army 2nd Lt. Jeffery Russell, 1st platoon leader, Baker Company and native of Copperas Cove, Texas, greets Afghan children in the village Sader Kheyl 17 March 2012 (U.S. Army, SSGT Jason Epperson)

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● *Impact*. The paper provided no evidence that the constructs would produce added value. Existing research in the general field of leadership does identify the relative value of the trait-like constructs proposed by McDonald. Research evidence shows that personality variables like those suggested by McDonald account for considerably less variability in leadership outcomes than do behaviors.

Background. The introduction of McDonald's paper questions whether leadership doctrine is lacking important factors or that some characteristics or competencies may be more important than others depending on context or leadership position. The paper questions the inclusion or exclusion of particular characteristics beyond the basis of intuition and experience. The paper states that integrating relevant empiricism into the process is required to construct a more complete model of leadership; however, it fails to provide the necessary empirical data, through independent data or established research, to support the proposed revisions to the model.

Evidence. The paper assumes that the Army's doctrinal model of leadership is based only on intuition and experience, failing to take into account the scientific approach that drove its development. The Army's doctrinal model of leadership was developed and validated using a scientific and professionally accepted approach referred to as competency modeling. The development effort was conducted through established management and governance practices of the Army Training and Leader Development Program initiatives (Initiative #7A1).

McDonald asserts that the development of the LRM was based largely on "anecdotal evidence" with content that "is based upon intuition and experience," and as a result is lacking in many of the critical factors relating to successful leadership. His source for this is the statement from the Introduction of FM 6-22 that states, "FM 6-22 combines the lessons of the past with important insights for the future to help develop competent Army leaders." McDonald failed to consider that empirical lessons could include theoretically sound content. He specifically fails to take into account the previous research that documents the rigorous effort that was used to develop and validate the LRM.

The effort was extensive in applying a full range of theoretical, conceptual, empirical, expert, and practical sources on leadership. The team of researchers responsible for developing the LRM took into account cutting edge academic theory and applied research to ensure the LRM fully captured those factors associated with leadership effectiveness relevant to the Army. Moreover, to build upon the theoretical and research findings, insights from experienced Army leaders (e.g., subject matter experts) were then analyzed to clearly identify factors related to successful leadership in both field and garrison operations and institutional organizations.

In whole, the model underwent a comprehensive content, construct, and criterion-referenced validation before being incorporated into Army doctrine, all of which was ignored by McDonald in his assertions regarding the LRM.

The following figure documents all of the steps in developing the model. Extensive review was conducted of psychology literature among other bodies of knowledge. The expert review used a Delphi technique to obtain independent judgments from a panel made up of general officers, government and academic researchers, and business practitioners. The technique followed with several rounds with the same set of experts to reconcile initial feedback and to develop a consensus. The expert review was followed by Center for Army Leadership (CAL) review and general officer approval to work toward wider staffing and implementation. The development phase is described in several sources.

This development phase was followed by formal validation conducted by CAL and the Army Research Institute. In parallel with the validation, the model went through a doctrinal concept paper staffing and review process between 2005 and 2006, as well as review and approval by the Leader Development Council of Colonels and the Leader Development General Officer Steering Committee. The LRM was then compared to other existing leadership models to ensure completeness and was deemed to have better coverage and cohesion than any others under consideration. Finally, the LRM was evaluated against the standards of the Office of Personnel Management civilian executive core qualifications and was found to be in complete concordance for Army civilians.

The development and refinement of the LRM did not stop after its initial development and continues to be validated empirically through follow-up

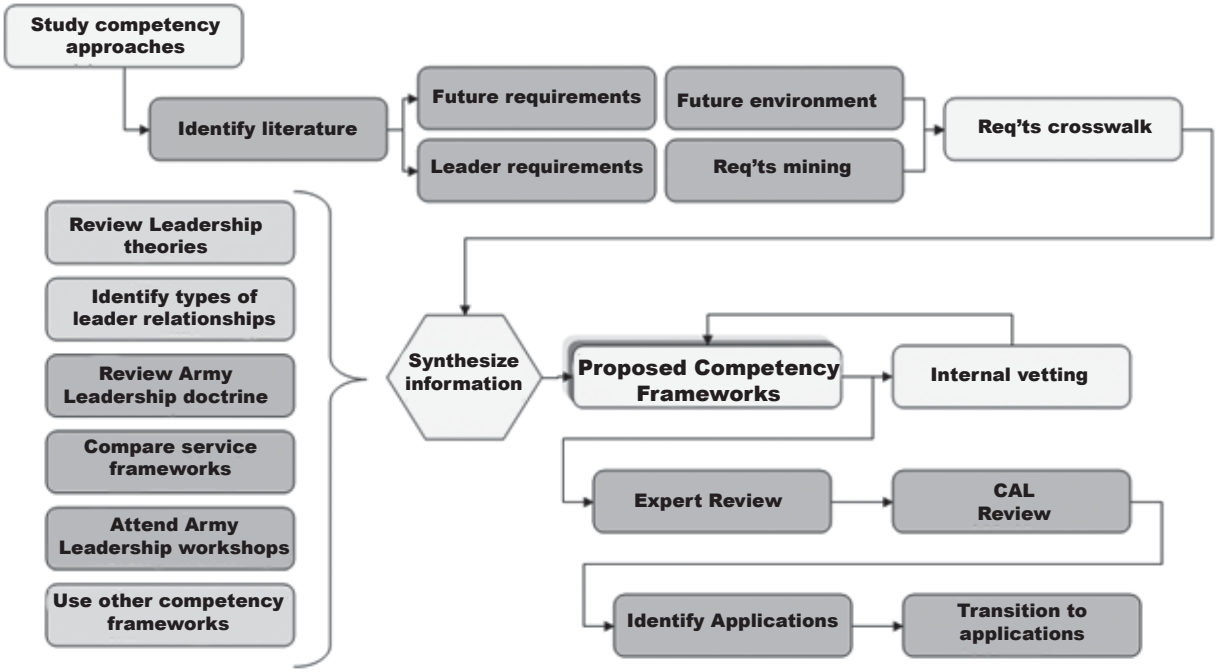

Figure 1

studies and the annual collection of data from the Annual Survey of Army Leadership. Daily collection of Army 360, Multi-Source Assessment and Feedback data is also a source of validating data for the LRM. The model underwent staffing reviews in 2010 and 2011 as part of the update to FM 6-22, during which 92 different agencies provided 1,559 individual comments with no comments indicating any need to replace or revise the LRM.

Contrary to the claims made by McDonald, the above citations are evidence of the the rigorous and empirical approach taken to develop and validate the LRM both from a scientific standpoint as well as from an operational field perspective. It is doubtful that any other doctrinal model or set of requirements in the Army have been more carefully or thoroughly examined, thus ensuring the LRM would be a useful and enduring tool for leaders to understand the requirements and critical components of successful leadership in the U.S. Army.

Redundancy. Another concern with the assertions made by McDonald is the redundancy with elements already in the LRM. More specifically, he makes reference to several "new" factors that should be included in the model, however he does this without analyzing the LRM and supporting literature on these factors in enough depth to realize they are already present in the model. While new research is always useful when considering revisions to models, it is critical to also apply the scientific principle of parsimony. Parsimony establishes the value of seeking the simplest explanation for phenomena. This principle is even more critical when considering the large and dispersed nature of the Army population and the need for maintaining a consistent understanding of leader requirements.

Moreover, adding the many constructs that McDonald suggests in his paper would violate this principle since those factors are already found in the current version of the LRM. The redundancies apparent in the constructs McDonald recommended for inclusion into the LRM are discussed below.

The redundancies begin with the discussion in the paper on the importance of ethical or moral reasoning. The developers of LRM and FM 6-22 are in complete alignment with McDonald's conclusions

with respect to the importance of this construct and therefore, placed considerable emphasis on character, Army Values, ethical reasoning, sound judgment, and leading by example. The constructs discussed by the author's own supporting literature are already well covered in the existing version of the LRM and FM 6-22, and he does not provide support for any aspects of moral reasoning not already captured in Army models.

McDonald also cites the importance of emotional intelligence and its relationship to leadership efficacy, which is referred to as confidence in the LRM. The LRM also includes empathy, presence, resilience, self-awareness, interpersonal tact, leading by example, extending influence, and communication. All of these characteristics are related to the popular concept of emotional intelligence (EI). The concept EI or "EQ" (emotional quotient) has received much criticism from researchers with respect to its lack of predictive validity for leadership as well as the many discrepancies that exist in how it is measured or defined. Emotional intelligence is not a universally accepted and institutionalized construct and has been questioned as to its distinctiveness as a construct separate from personality, general intelligence and ability, and the accuracy of using self-report measures.

McDonald does not address any of these concerns or limitations associated with the construct or measurement of EI. In fact, he even exaggerates the relationship between one measure of EQ and leadership effectiveness as "strong," when even the author of the source article referred to it as moderate. With such conceptual confusion the term "emotional intelligence" has become a sort of catch-all buzzword for all things related to social awareness and interpersonal skills.

Including EI into the LRM would be inappropriate as Army doctrine is written for all levels of leaders, from a specialist seeking to become a corporal up to Army civilians, executive managers, and general officers and as such aims to avoid jargon. The conceptual confusion and overlap with other existing LRM constructs suggests that an additional emotional intelligence emphasis would not add incremental validity to leadership performance and outcomes.

One point of the paper's criticism is that FM 6-22 has four paragraphs about empathy. Length is one proxy for importance but doctrine is not planned by apportioning length but by including what is important to describe to make relevant points. The attribute of empathy was added along with other attributes and competencies in the 2006 version of leadership doctrine while reducing the length by 25 percent from the earlier version.

Another way to view importance is to consider how a construct is framed, and empathy is specifically mentioned in FM 6-22 as one of 12 attributes. More importantly, the LRM describes a cluster of concepts related to empathy, including interpersonal tact, interacting with others, valuing diversity among people, self-control, balance, and stability, as well as composure and resilience.

Another trait McDonald advocates for inclusion is hardiness or resiliency. Resilience was also added as an attribute to the current (2006) version of FM 6-22 (notably, well before the Comprehensive Soldier Fitness Program was instituted). The paper incorrectly reports that the description of resilience in FM 6-22 "primarily revolves around its application to combat." The manual does provide the story of Sergeant Leigh Ann Hester's actions under fire and how disciplined training had set the conditions and led to effective response to an ambush. However, the preceding paragraphs in FM 6-22 do not restrict the application of resilience to combat. In fact, paragraph 5-17 specifically uses phrases such as "no matter what the working conditions are... all members of the Army—active, reserve, or civilian... everyone needs an inner source of energy to press on to mission completion." McDonald later cites research that shows how resilience is especially useful for serving as a stress buffer in combat exposure, the very point he criticizes in FM 6-22. McDonald also incorrectly implies that resiliency is characterized in FM 6-22 as a "behavior" despite its clear listing as an "attribute."

The paper also discusses the social concept of leadership outlined in S. Alexander Haslam, Stephen D. Reicher, and Michael J. Platow's book, *The New Psychology of Leadership,* published in 2011. Based on the book, McDonald discusses the importance of leader-follower commonalities, in-group prototypical characteristics, in-group champion, group identity, and group norms. Army leadership doctrine and the LRM already incorporate social aspects of leadership. LRM competencies are

focused on constructs that involve an interaction between a leader and one or more people. Existence of interaction is an essential principle adopted in the development of the LRM. FM 6-22 addresses leaders, followers, teams, organizational structures, and connected concepts related to group factors.

Since doctrine uses simple, unambiguous descriptions, performance and development requirements are framed for an individual leader; however, followers, teams, people, units, organizations, situations, resource factors, and adversarial factors are addressed. Leadership is inherently a social process involving interpersonal interaction. The competencies, components, and sample actions listed in Appendix A of FM 6-22 align with the ideas of leadership as social phenomena within and across groups.

McDonald's paper and the referenced book offer concepts that are not fully operationalized and suggest potential challenges in following other principles such as alignment and nesting of purpose and unit actions across echelons. The Center for Army Leadership has been advancing the body of knowledge on the social aspects of leadership by sponsoring research on collective aspects of leadership, which even goes beyond McDonald's recommended construct of social identity to address the alignment of purpose and actions across multiple leaders and echelons.

Impact. While considering individual constructs and how each is related to leadership, McDonald fails to make a cohesive argument or provide supporting evidence that his recommended constructs are indeed the most critical factors that contribute to effective Army leadership, something his paper says that it set out to do. Despite calling out the need to evaluate factors based on empirical evidence and providing evidence that they relate to leadership outcomes for some of the factors, McDonald does not identify any criteria, rules, or processes that he used to determine that these factors were more important than factors currently in the model or even for other factors that may be addressed in the literature but that he does not review (e.g., conscientiousness, expectations, and cohesion).

McDonald might have considered that empirical evidence of a relationship between a leadership construct and effectiveness by itself is not all that should be considered when identifying desired leadership factors. Leadership can be a catalyst that can set a process into motion, but it can also be disrupted, denied, or reversed through other leaders, followers, environmental circumstances, an adversary's actions, or other factors. Leaders do not have total control over results, and as such these intervening actions can limit or negate leader outcomes. Unpredictable dynamics and uncontrollable external forces are sometimes stronger than the best leader's intentions and effort. Not only are conditions unpredictable, subordinates do not always follow guidance or expectations. All of this reminds leadership researchers to be careful in interpreting and generalizing results from a study that may not share ecological validity with military applications, such as several of the empirical references cited by McDonald.

Through CAL research we believe strongly that the Army leader core competencies and attributes are positively associated with leader effectiveness. In validation of 360 assessment instruments for the Army, the 360 ratings of commander behaviors had significant amounts of variance in common with long-term potential (24 percent), competence ratings (49 percent), and overall performance (80 percent).

McDonald focused on characteristics that leadership doctrine identifies as attributes. However, studies show that leader attributes tend to have less impact on leadership outcomes than do leader behaviors. Regression studies can identify how much various factors relate to or predict the variance of outcomes. In an integrative study examining leader traits and behaviors, behavior contributed greater proportions to all four outcomes they examined. The amount of variance in the outcomes predicted by both traits and behaviors ranged from 31 to 92 percent. Leader behaviors had a 3 to 1 contribution over traits on leader effectiveness, 3 to 2 contribution on group performance (the lowest value of 31 percent), a 15 to 1 contribution on follower job satisfaction, and 6 to 1 contribution on follower satisfaction with the leader. These results suggest that leader traits will have less impact on leadership outcomes than leader behaviors and thus are less vital to identify.

Another way to consider the relative importance of attributes and behavior-based competencies is to look at criticality ratings of items associated

with the LRM. The first validation of the model by Army researchers asked for leaders' ratings of importance, criticality, and degree of emphasis. Among 102 items representing behaviors, attributes, and distracter items, most attributes were rated in the middle third of importance.

Criterion-referenced validation is often considered the most telling of approaches to validation because it determines the degree to which behaviors relate to a performance criterion. In the validation of the Army's Leadership Requirement Model, the set of leader behavior processes from the model predicted 48 percent of the variance in the criterion ratings given by the leader's superior. This means that nearly half of the variance in performance across the tested sample can be attributed to characteristics identified in the LRM, a very good level of prediction of performance.

Summary Points

● Army Leadership Requirements Model in leadership doctrine is based in science and effective practice and has been extensively validated.

● Continued discourse on the Army leadership model is vital to sustaining an effective model of requirements. Thus, continued research, review articles, discussion papers, and criticism are necessary. However, published documents need to accurately represent facts and avoid false information and unsupportable conclusions. In such cases, a reasoned discourse process is prevented.

● A supported and validated model of leadership requirements has value by informing leaders what distinguishes effective performance and will align the practice of leadership within and across Army units and organizations. An enduring model of leadership provides the ability to align leader development policies, systems, and practices to a core set of requirements for a leader to benefit from throughout a career. Any gratuitous changes to the model come with unwanted costs.

● FM 6-22 was innovative in requiring leaders to establish resiliency and empathy and extend influence beyond one's unit. These additions and the creation of a cohesive model of attributes and competencies were based on the use of empirical research, theoretical models, and other documented methods and sources.

● FM 6-22 lists a set of multiple attributes and competencies; however, the meaning of leadership is greater than the individual pieces. The labeling of attributes and competencies is not as important as what is represented. The performance of effective behaviors by leaders and followers is an operational imperative. The reference to a particular research construct over a related one is less relevant.

● It is apparent that McDonald's review of the relevant research was incomplete and his corresponding recommendations were based upon incorrect assumptions about FM 6-22. FM 6-22 and the LRM are based on a process using an empirically valid model of leadership and one that is informed by military leader expertise and operational practice.

● As the director of the Center for Army Leadership, I fully support and encourage students to write papers and articles that offer diverse opinions and ones that challenge the institution. Differences of opinion can exist, but the concerns with McDonald's article are not opinion differences. They are factual inaccuracies and gaps in assumptions that if not corrected could harm operational performance and cause millions of dollars to be spent unnecessarily in revamping leadership processes, instruction, and leader development systems. ***MR***

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