

2010

Formal Mentoring in the U.S. Military—Research Evidence, Lingering Questions, and Recommendations

W. Brad Johnson

Gene R. Anderson

Follow this and additional works at: <https://digital-commons.usnwc.edu/nwc-review>

Recommended Citation

Johnson, W. Brad and Anderson, Gene R. (2010) "Formal Mentoring in the U.S. Military—Research Evidence, Lingering Questions, and Recommendations," *Naval War College Review*: Vol. 63 : No. 2 , Article 9.
Available at: <https://digital-commons.usnwc.edu/nwc-review/vol63/iss2/9>

This Article is brought to you for free and open access by the Journals at U.S. Naval War College Digital Commons. It has been accepted for inclusion in Naval War College Review by an authorized editor of U.S. Naval War College Digital Commons. For more information, please contact repository.inquiries@usnwc.edu.

FORMAL MENTORING IN THE U.S. MILITARY

Research Evidence, Lingerin Questions, and Recommendations

W. Brad Johnson and Gene R. Andersen

Mentoring is a developmental relationship in which a more experienced person serves as a guide, role model, teacher, and sponsor for a less experienced person—usually in the same organization. A mentor typically becomes invested in the career progression and development of the protégé or mentee and often provides such essential functions as counsel, challenge, and support. At times, mentorships evolve into enduring friendships, even after the active phase of the relationship has ended.¹

Dr. Johnson is professor of psychology in the Department of Leadership, Ethics, and Law at the U.S. Naval Academy and a faculty associate in the Graduate School of Education at Johns Hopkins University. A clinical psychologist and former lieutenant commander in the U.S. Navy Medical Service Corps, he served as a psychologist at Bethesda Naval Hospital and the Medical Clinic at Pearl Harbor. Dr. Johnson is the author of numerous publications, including ten books, in the areas of mentoring, professional ethics, and counseling.

Gene R. Andersen is associate professor of leadership education in the Naval War College's College of Operational and Strategic Leadership. A retired naval aviator, he is a former director of leadership education in the Department of Leadership, Ethics, and Law at the U.S. Naval Academy and project leader for the Primary Professional Military Education course at the Center for Naval Leadership. He edited two leadership texts for use at the Naval Academy. He is a graduate of the U.S. Naval Academy and the U.S. Naval War College.

Naval War College Review, Spring 2010, Vol. 63, No. 2

In the last several years, mentoring has become a hot topic among military leaders. The U.S. Army's field manual series now includes a specific publication on the development and effective conduct of mentorships with subordinates.² In his 2003 "Guidance for the Navy," the Chief of Naval Operations at that time, Admiral Vernon Clark, specified that mentoring sailors should be a preeminent focus of the Navy; Admiral Clark went so far as to direct that a mentor be assigned for every service member on active duty.³ In the last three years alone, formal mentoring programs and online e-mentoring matching services have proliferated within the armed forces.

Why has mentoring so captured the military's attention? There are several good reasons. Evidence in the civilian world suggests that effective mentoring relationships can enhance corporate recruitment and

retention efforts, help to bring new hires up to speed, support diversity initiatives, enhance employee satisfaction and promotion success, support strategic succession planning, and improve communication and knowledge transfer within organizations.⁴ In the military, anecdotal evidence and survey research suggest that flag officers often report having been mentored by senior officers at key junctures in their careers; mentors play a role in getting new talent noticed and promoted.⁵

Perhaps even more important, extensive literature reviews of three decades of research on mentoring outcomes in civilian organizations reveal that mentoring clearly fosters career success.⁶ Across organizations, settings, and research designs, those who report having had a mentor enjoy more rapid promotions, greater productivity, better professional confidence, higher competence, lower levels of job-related stress, more positive attitudes toward work, more career satisfaction, and even a greater perceived chance of becoming eminent in their fields. What's more, mentored employees are more committed, both to their organizations and to their careers.⁷ The most extensive meta-analytic cross-disciplinary review of mentoring research to date reviewed 15,131 articles and reports on the topic.⁸ Findings from 112 studies that satisfied the rigorous inclusion criteria of that review revealed that mentoring had significant positive correlations with work performance, retention, organizational citizenship behavior, positive work attitudes, personal health, quantity of interpersonal relationships, greater career recognition, and general career competence. Although a variety of other variables clearly influence career success (e.g., ability, personality, motivation), it is clear that the positive effects of mentoring are pervasive and consistent.⁹

In light of the success of mentoring in the business arena, many organizations have instituted formal mentoring programs. "Rather than leave mentoring to happenstance, formal programs give the organization control over who is mentored, when they are mentored, and even how they are mentored."¹⁰ Considering the "war for talent" in the contemporary business environment, institutions such as the military are well served by programs that attract, retain, and develop top-notch talent.¹¹ Further, recent survey research indicates that new college graduates are more attracted to organizations depicted as having formal mentoring programs.¹²

Although formal mentoring programs are multiplying in the military and other organizations, there is relatively little research evidence bearing on the design, key ingredients, and ultimate efficacy of these programs.¹³ Further, very few organizations have strategically aligned their mentoring programs with long-term objectives;¹⁴ like other organizations, the military has implemented formal mentoring programs in the absence of a corporate- or command-level

mentoring strategy. Getting the programmatic cart before the strategic horse may help to explain the negative emotional reactions that the term “mentoring” tends to elicit in some surveys of military personnel.¹⁵

The purpose of this article is to review evidence related to mentoring in organizations, particularly military organizations. The authors specifically emphasize the literature bearing on formal mentoring programs and highlight the salient variables linked with program outcomes. The article concludes with numerous recommendations for military leaders who wish to integrate formal mentoring programs into their strategic planning.

MENTORING IN THE MILITARY

There are relatively few published studies of mentoring prevalence and outcomes in military organizations. Two studies of Naval Academy midshipmen, with sample sizes of 568 and 576, show that between 40 percent and 45 percent of midshipmen report having significant mentoring relationships at the Academy.¹⁶ Female midshipmen are more likely (63 percent) than male midshipmen (45 percent) to be mentored, and mentors are most often military officers (41 percent), civilian faculty members (30 percent), or more senior midshipmen (28 percent). Although having a mentor was not correlated by these studies with academic standing, students mentored at the Naval Academy are significantly more satisfied with their education and significantly more likely to mentor others in return.¹⁷

A large survey of mentoring in the Army ($N = 3,715$) revealed that 84 percent of both senior noncommissioned officers and commissioned officers report having at least one mentor in the course of their careers.¹⁸ There were no disparities in prevalence or perceived value of mentoring based on gender or race of respondents. The most recent study of mentoring in the military surveyed 305 senior military officers attending the National War College.¹⁹ Findings revealed that 91 percent had been mentored during their military careers and that 87 percent had mentored other military members in turn. These officers reported benefiting from both career and psychosocial mentoring functions or mentor behaviors.

Finally, there is one published study on the mentoring experiences of flag-rank officers in the Navy.²⁰ Six hundred ninety-one retired admirals responded to a Navywide survey of their mentoring experiences while in the fleet. A full 67 percent reported having at least one salient mentor during their careers as officers, and most had had at least three important mentors. In most cases, the mentorships formed due to the mentors' initiative or through mutual interest. Admirals who had been mentored were extremely satisfied with the experience, more satisfied with their Navy careers than were nonmentored respondents,

and significantly more likely to rate mentoring as extremely important for the Navy.

The sparse published research on mentoring in the military shows that the probability of finding a mentor increases the longer one serves and that mentoring seems to bolster satisfaction with one's military education or career. Mentoring also begets mentoring; mentored military personnel are more likely to report mentoring others. Mentoring appears to be an equal-opportunity relationship in the military, in that women and minority respondents are mentored at rates equivalent to men and majority-group members. Finally, when mentoring occurs, it is often because a senior person in the military initiates the relationship; it is possible that hierarchical elements of the military culture make mentee-initiated relationships less likely.

FORMAL MENTORING PROGRAMS

Formal mentoring programs are now ubiquitous features of most organizations and institutions. *Informal*, or traditional, mentoring relationships emerge slowly and naturally through informal interactions between junior and senior members of organizations; without any external intervention, these relationships are often spontaneous, rooted in shared interests, and mutually initiated.²¹ In contrast, a *formal* mentoring relationship is instigated by an organization and usually involves formal assignment or matching of mentee to mentor.²² One researcher recently distinguished formal from informal mentorships using four salient dimensions.²³ *Intensity* is the first dimension; informal mentorships are more intense emotionally, because both members are committed naturally and intrinsically. *Visibility* is the second dimension; while formally assigned mentorships are known and accepted by the organization, informal pairings are less visible and often operate without the endorsement or even awareness of the organization. The third dimension is *focus*. In formal mentoring programs, the organization often prescribes who can mentor, what training will occur, and what the focus of mentorship shall be; this is in contrast to informal dyads, which tend to be more generally focused on the mentee's career and psychosocial development. Finally, formal and informal mentorships vary on the basis of *duration*. Whereas informal relationships are unconstrained with regard to parameters and are therefore much longer in duration, formal pairings usually operate within clear guidelines for meeting frequency and have expectations about termination. Many formal mentoring programs share common goals, such as socializing new members into organizational culture, planning succession, lowering attrition, or retaining more women and minority employees.²⁴

What does the outcome research show about the efficacy of informal versus formally assigned mentorships? Both traditional and meta-analytic literature

reviews consistently indicate that when formal and informal mentoring relationships are compared, informal mentoring is superior to that formally assigned.²⁵ In fact, not a single well-controlled study has shown formal mentoring to be superior to informal mentoring.²⁶ In several studies, formal mentorships result in equivalent or even superior levels of psychosocial support (e.g., emotional encouragement), but formal programs rarely produce equivalent career support. The fact that formal mentorships are limited in duration may help to explain why there is less time for the mentor to offer career-related functions. “The difference between how protégés in informal and formal programs were selected could explain the improved success of informal mentoring. In informal mentoring, mentors and protégés select each other naturally as part of a mutual attraction and similarity of interests and personality characteristics.”²⁷

Similarly, it has been noted that in formal programs, perfect strangers may be paired on the basis of little data or with little communication about the matching process: “Finding a mentor in a formal program may be like trying to find true love on a blind date—it can happen, but the odds are against it.”²⁸

One of the problems with evaluating the efficacy of formal mentoring programs is the wide heterogeneity across programs with respect to program design and implementation. Programs vary wildly with regard to rigor of the matching process, recruitment and training of mentors, promulgation of clear program expectations to both members of the dyad, level of mentor commitment, and ongoing organization oversight and support.²⁹ When formal mentoring programs are compared on the basis of level of facilitation by the organization—high-facilitation programs provide thorough training for both parties, monthly oversight meetings, etc.—outcomes indicate that employees in high-facilitation programs report greater levels of satisfaction and organizational commitment.

In spite of the fact that U.S. military commands have instituted broad and sweeping requirements for mentoring, including formal mentoring programs in many locations, a careful review of the literature reveals not a single published evaluation of the efficacy of formal military mentoring. The only outcome report evaluating mentoring with American military personnel was presented at a conference in 1998; it generally supported the conclusions of researchers in civilian organizations. Compared to a small sample of Medical Service Corps officers in a formal mentoring program, officers in informal mentorships had slightly higher job satisfaction and firmer intentions to remain in the Navy; however, officers in both formal and informal programs were more satisfied and more likely to remain in the Navy than those reporting no mentor relationship.³⁰ In a broad survey of formal mentoring programs in six Taiwan service academies ($N = 1,083$), participation in a formal mentoring program led to greater

satisfaction, greater career commitment, and decreased stress than was the case for students with no mentors;³¹ there was no comparison to students who were informally mentored. Finally, it has been reported that a formal peer mentoring program in the British Royal Marines was used successfully to identify and ameliorate trauma-related mental-health problems. This program, however, had little connection to mentoring as commonly conceptualized and more to do with trauma risk management and peer support.³²

A survey of officers in the U.S. Army revealed that although many officers want mentorships, they do not want formal programs to legislate these relationships.³³ For many in the military, mentoring has become a faddish buzzword; a traditionally meaningful developmental relationship has slowly become saddled with the baggage of programmatic requirements and checklists. Various authors have warned organizations about the pitfalls of instituting formal mentoring programs in the absence of a thoughtful strategy: “The absence of a corporate mentoring strategy can lead to inconsistencies and inefficiencies across formal mentoring programs within an organization. This ineffectiveness can lead to formal mentoring programs being attacked, discredited, and ultimately, discontinued.”³⁴

MILITARY MENTORING: VEXING PARADOXES AND LINGERING QUESTIONS

The foregoing literature review sets the stage for a survey of the ongoing questions and perennial tensions regarding efforts to formalize mentoring in the military. We now summarize the most pressing of the lingering issues and unanswered questions.

Few Mentoring Programs Operationally Define the Term “Mentoring.” Even a cursory review of the formal mentoring-program research reveals that researchers and program administrators employ a heterogeneous collection of mentoring definitions or, worse, fail to define the term altogether.³⁵ Within the military, the term “mentoring” is used so cavalierly and applied to such a wide array of command programs and initiatives that service members—including program participants—may have little idea what mentors are supposed to “do” and what these dyads are supposed to accomplish; this, of course, may elicit a range of reactions to formal programs, from enthusiasm to cynicism.³⁶ Although the Army’s Field Manual 6-22 now differentiates mentorship from counseling and coaching, defining it as “the voluntary developmental relationship that exists between a person of greater experience and a person of lesser experience that is characterized by mutual trust and respect,” we suspect that this definition and the subsequent discussion in the manual only scratch the surface

when it comes to helping the average soldier execute an effective mentorship.³⁷ It will behoove senior military leaders to operationalize clearly such terms as “mentor” and “mentoring” and to differentiate the mentor relationship from sponsorship, coaching, counseling, and leadership more broadly.

For Better or Worse, the Term “Mentoring” Comes with Baggage in the Military.

Perhaps more than many organizations, the U.S. military—owing to a high degree of functional specialization—contains a wide array of distinct subcultures. A number of groups within the military harbor entrenched negative views regarding the mentoring construct. For instance, some officers equate mentoring with exclusivity, unfairness, and cronyism.³⁸ Nowhere was this negative reaction more evident than in reactions to the “Green Bowlers,” a secret fraternity of Naval Academy graduates whose members aroused fierce condemnation in the early twentieth century by helping one another gain promotion in the fleet;³⁹ to this day, many senior naval officers equate mentoring with favoritism. In contrast, recent interviews with a large sample of U.S. Navy admirals revealed that mentorship is associated with meritocracy in the minds of many.⁴⁰ That is, many admirals believe that star-quality officers get mentored and that such extra attention is well deserved and even essential if the Navy is to achieve sound succession planning in its leadership. Either way, a successful military-wide mentoring program must address the historical baggage.

Does Everyone Deserve to Be Mentored? Many formal mentoring programs are rooted in the assumption not only that everyone deserves to be mentored but that everyone will benefit from it. In fact, however, traditional mentorships are by nature exclusive and designed to nurture and promote the rising stars in any organization.⁴¹ If high-quality and purposeful mentoring offers one avenue for military leadership succession planning, the military will need both to encourage broad career-development programs for all military members and to craft more intensive and selective mentoring pipelines for its most promising junior talent.

Mentoring Is Only One Predictor of Career Success in the Military. At times, organizations are smitten with the idea of mentoring; charging ahead with mandatory mentoring programs for all employees, program administrators can easily forget that mentoring—while profoundly helpful to many—is just one of several variables predicting career success. For instance, various strands of organizational research indicate that—in addition to being protégés—persons who have more need for achievement, intelligence, goal orientation, career motivation, self-confidence, and flexibility are likely to achieve greater career success than those with lower scores on those variables.⁴² It is important to keep in mind that mentoring accounts for only a portion of the explained variance in career

success for military personnel. In addition to developing mentoring programs, military leaders should consider educational and skill-development modules designed to enhance career self-efficacy, initiative taking, and goal orientation in military personnel.

Developmental Networks Are More Powerful than One-on-One Mentoring Alone. Although most human resources leaders still think in terms of traditional one-on-one mentoring when formulating mentoring programs, recent theoretical and empirical developments support the comparative virtues of *developmental networks* or *mentoring constellations*. One team of researchers defines a developmental network as “the set of people a protégé names as taking an active interest in and action to advance the protégé’s career by providing developmental assistance.”⁴³ Rather than place the entire burden for career and personal development on a single mentor, military organizations should recognize the value of multiple short-term mentors, peer mentors, mentoring groups, and online support communities. The more diverse an individual’s developmental network, the greater the depth and breadth of career support.

Not All Mentoring Is Effective Mentoring. Officers and senior enlisted personnel often bemoan programmatic efforts aimed at making mentoring universal and mandatory. These leaders know that merely assigning everyone to a “mentor” does little to ensure effective and helpful developmental relationships. There are two primary problems here. First, there is tremendous variation in the motivations, interests, and skill levels of prospective mentors;⁴⁴ frankly, not just anyone can become an effective mentor. Many military members possess strong technical skills but poor interpersonal ones; they will probably not be effective mentors. Second, disgruntled, indifferent, or hostile mentors can wreak havoc on the lives and careers of junior personnel. Even a marginal mentor—one who disappoints or ignores protégés—can be worse than no mentor at all.⁴⁵ Military leaders must become selective when inviting personnel to become formal mentors; careful vetting and selection should be followed by thorough training and ongoing supervision and support.

Extrinsic Rewards Don’t Work as Well as Intrinsic Rewards. Like many organizations, the military has failed to appreciate the power, and the fragility, of intrinsic motivation to mentor. In any organization, the most powerful, effective, and valuable mentors are those who are naturally invested in and personally committed to developing junior talent.⁴⁶ Intrinsically motivated mentors undertake the task for the internal pleasure of seeing protégés develop and succeed. But when an organization requires these same people to mentor and even makes performance appraisals contingent upon it, the magic, pleasure, and satisfaction of mentoring declines and may even be lost entirely.⁴⁷ It is clear that, in what is

known as the “overjustification effect” in behavioral science research, extrinsic rewards or requirements may temporarily increase frequency of the behavior while decreasing long-term interest and commitment; what was once done for pleasure now becomes drudgery.⁴⁸ Military leaders must wrestle not only with selecting excellent mentors but also with nurturing their intrinsic motivation and protecting them from burnout.

The Paradox of Program Oversight. Should military mentoring programs employ stringent program oversight or a hands-off approach? The answer to this question remains elusive. When protégés perceive strong management support for mentoring, they often report more positive career and psychosocial benefits and fewer negative outcomes.⁴⁹ Further, when formal mentoring programs adopt high-level facilitation strategies, engaging and overseeing the mentoring dyads frequently, protégés report higher levels of job satisfaction, organizational commitment, and even job performance. But here is the paradox: the more mentors perceive that they are being held accountable and scrutinized, the less willing they are to serve as mentors. Thus while greater perceived management support for mentoring predicts better outcomes, perceived mentor accountability results in less willingness of potential mentors to volunteer. “The negative relationship with mentor willingness to mentor, coupled with the likely low base rate of serious problems with mentors suggests that increasing mentor accountability may backfire on organizations by turning off potentially good mentors to mentoring.”⁵⁰ Clearly, military program strategists will have to find the “right” balance among public support, oversight, and accountability.

NOT EVERYONE HAS WHAT IT TAKES

Mentoring matters; several decades of empirical research confirm that mentorships in nearly any setting offer measurable benefits to both protégés and those organizations that employ them. In comparison to their nonmentored peers, protégés are more rapidly promoted, better compensated, more confident, more competent, more likely to achieve leadership positions, and more inclined to serve as mentors in their turn.⁵¹ But the vast majority of mentoring research pertains to more traditional or informal mentoring relationships, and there is nearly no published evidence regarding formal mentoring efforts in the military.

In this concluding section, we offer several recommendations for military leaders and human resources personnel tasked with developing, managing, and evaluating programmatic mentoring efforts for military personnel. These *best practice* considerations are designed to provide a way forward notwithstanding the sparsity of empirical evidence and of answers to lingering questions.

Develop a Master Strategy before Implementing Mentoring Programs. Rather than charge ahead with mentoring programs—especially those of the mandatory variety—wise leaders will first enter into a process to envision a corporate or military-wide mentoring strategy. A successful mentoring strategy will take into account organizational dynamics such as culture, hierarchical structures, traditions, and resources, as well as mentoring objectives specific to an entire military branch or a local command. An overarching military mentoring strategy will provide a clear rationale and framework for mentoring and, subsequently, a sense of cohesion among the varied programs within the military. Such a strategy will also help to reduce the probability that mentoring programs will be seen as passing fads, ultimately phased out.

Avoid Mandatory Programs: Facilitate a Sense of Choice. Nothing undermines the efficacy of a formal mentoring program more quickly than the sense that one has no choice about participating. The evidence is clear: when mentors and mentees both feel that they have clear choices—about both participating and whom with—both parties report more positive outcomes.⁵² When third parties match mentoring dyads, matching criteria may be unrelated to interpersonal compatibility or, worse, entirely haphazard. Military program planners will do well to make participation in formal mentoring programs entirely voluntary. Moreover, they should solicit input from participants regarding preferences for specific interests, values, or characteristics in prospective mentoring partners. “By perceiving that they have a voice in the matching process, mentors and protégés may start to invest in the relationship prior to its official beginning; accordingly, both parties are likely to feel greater motivation to maximize the relationship.”⁵³ This will require a culture shift in many military organizations. At present, many commands require each new member to be assigned a formal mentor; participation is not voluntary, and little consideration is given to issues of match. Further, few of these programs articulate an overarching strategy, desired outcomes, or relationship “contours,” such as anticipated duration or frequency of contact.

Demonstrate Top-Down Support for Mentoring. Mentoring relationships will occur naturally in any context; mentoring in the military has flourished for centuries without command intervention. But if the military is serious about enhancing the quality of mentoring and extending the benefits of these relationships to a wider swath of the military population, it will be critical for key leaders to support mentoring efforts publicly. Organizational evidence shows that when leadership clearly communicates commitment to developmental relationships and even models effective mentoring behaviors itself, mentoring frequency and quality increase.⁵⁴ Nonetheless, and although vocal

public leadership support for mentoring, backed by appropriate resources, is key, military leaders must take care to avoid micromanaging mentors and requiring participation in formal mentoring programs.

Develop a Mentoring Continuum. Heretofore, many military programs have operated under the assumption that developmental relationships are dichotomous—that a person is either being mentored in a traditional one-to-one mentorship or that person is not being developed. In fact, considerable theoretical and empirical research supports a developmental network or mentoring constellation model that helpfully broadens definitions of mentoring. A continuum model bearing on talent development and retention in the military should focus on a range of programs designed to facilitate and reinforce career and personal growth. At one end of the continuum are career-development classes, short-term sponsorship at new duty stations, and other soft-sell approaches. At the other end of the spectrum are formal mentoring programs involving pairings between protégés and mentors designed to endure for substantial periods of time. However, even in the case of formal programs, it will behoove military planners to support flexibility and culture-specific program development in local commands; mentoring programs should be customized to cultural expectations, participant preferences, deployment schedules, and other relevant variables. Finally, the continuum should include mentoring tools, such as online and in-class training opportunities, and access to social networking communities to facilitate good communication over time.

Select Mentors Carefully. Not everyone has what it takes to mentor effectively. In the military culture, where frequent duty-station changes and expectations for equity in the workplace are fixtures, it is often assumed that personnel can easily be plugged in to new jobs and work settings with only cursory training. Although this strategy may be effective in technical situations, the same is not the case for interpersonal roles. Interpersonal skills like communication ability, empathy, listening, and emotional intelligence forecast greater success in the mentor role.⁵⁵ When developing formal mentoring programs, planners should consider vetting mentors and deliberately selecting those with demonstrated efficacy in other interpersonal relationships. Formal mentors who are disengaged, unreliable, exploitive, or lacking in essential communication skills may cause considerable harm to protégés and to the military's efforts at retention and talent development.

Develop High-Quality Training Programs for Mentors. It is unreasonable to expect military leaders—no matter how experienced—to understand fully the form and function of mentorship. Research in varied organizations indicates that the quality of mentor-training programs can literally make or break them. If

the military is serious about developing an excellent mentoring continuum, it is essential to create cutting-edge training in the art and science of mentoring at a central setting. In order to ease the burden on individual local commands, mentor-training workshops, online skill-development modules, and other resources should be created and distributed through the services' Web portals. Excellent mentor training can also be integrated into periodic leadership training often required in various schools required for promotion throughout the military.

NOTES

1. Lillian T. Eby, "Alternative Forms of Mentoring in Changing Organizational Environments: A Conceptual Extension of the Mentoring Literature," *Journal of Vocational Behavior* 51 (1997), pp. 125–44; W. Brad Johnson and Charles R. Ridley, *The Elements of Mentoring*, rev. ed. (New York: Palgrave MacMillan, 2008).
2. U.S. Army Dept., *Army Leadership: Competent, Confident, and Agile*, Army Field Manual [hereafter FM] 6-22 (22-100) (Washington, D.C.: 2006).
3. See W. Brad Johnson and Gene Andersen, "How to Make Mentoring Work," U.S. Naval Institute *Proceedings* (April 2009), pp. 26–32.
4. Johnson and Ridley, *Elements of Mentoring*; Delores M. Wanguri, "Diversity, Perceptions of Equity, and Communicative Openness in the Workplace," *Journal of Business Communication* 33 (1996), pp. 443–57.
5. W. Brad Johnson et al., "Does Mentoring Foster Success?" U.S. Naval Institute *Proceedings* (December 1999), pp. 44–46; Edgar F. Puryear, *American Admiralty: The Moral Imperatives of Naval Command* (Annapolis, Md.: Naval Institute Press, 2005).
6. Georgia T. Chao, "Formal Mentoring: Lessons Learned from Past Practice," *Professional Psychology: Research and Practice* 40 (2009), pp. 314–20; Lillian T. Eby et al., "Does Mentoring Matter? A Multidisciplinary Meta-analysis Comparing Mentored and Non-mentored Individuals," *Journal of Vocational Behavior* 72 (2008), pp. 254–67; John D. Kammeyer-Mueller and Timothy A. Judge, "A Quantitative View of Mentoring Research: Test of a Model," *Journal of Vocational Behavior* 72 (2008), pp. 269–83; Belle R. Ragins, John L. Cotton, and Janice S. Miller, "Marginal Mentoring: The Effects of Type of Mentor, Quality of Relationship, and Program Design on Work and Career Attitudes," *Academy of Management Journal* 43 (2000), pp. 1177–94.
7. Stephen M. Colarelli and Ronald C. Bishop, "Career Commitment: Functions, Correlates, and Management," *Group and Organizational Studies* 15 (1990), pp. 158–76.
8. Eby et al., "Does Mentoring Matter?"
9. Zinta S. Byrne, Bryan J. Dik, and Dan S. Chiaburu, "Alternatives to Traditional Mentoring in Fostering Career Success," *Journal of Vocational Behavior* 72 (2008), pp. 429–42; Kammeyer-Mueller and Judge, "A Quantitative View of Mentoring Research."
10. Chao, "Formal Mentoring," p. 314.
11. Ernest Friday and Shawnta S. Friday, "Formal Mentoring: Is There a Strategic Fit?" *Management Decision* 40 (2002), pp. 152–57.
12. Tammy D. Allen and Kimberley E. O'Brien, "Formal Mentoring Programs and Organizational Attraction," *Human Resource Development Quarterly* 17 (2006), pp. 43–58.
13. Tammy D. Allen, Lillian T. Eby, and Elizabeth E. Lentz, "Mentorship Behaviors and Mentorship Quality Associated with Formal Mentoring Programs: Closing the Gap between Research and Practice," *Journal of Applied Psychology* 91 (2006), pp. 567–78.
14. Friday and Friday, "Formal Mentoring."
15. Gregg F. Martin et al., "The Road to Mentoring: Paved with Good Intentions," *Parameters* 32 (2002), pp. 115–27.

16. Bret T. Baker, Susan P. Hocevar, and W. Brad Johnson, "The Prevalence and Nature of Service Academy Mentoring: A Study of Navy Midshipmen," *Military Psychology* 15 (2003), pp. 273–83; W. Brad Johnson et al., "Mentoring Experiences among Navy Midshipmen," *Military Medicine* 166 (2001), pp. 27–31.
17. Baker, Hocevar, and Johnson, "Prevalence and Nature of Service Academy Mentoring."
18. Alma G. Steinberg and Diane M. Foley, "Mentoring in the Army: From Buzzword to Practice," *Military Psychology* 11 (1999), pp. 365–79.
19. Mark A. McGuire, "A Joint Perspective on Mentoring: A Look by Senior Military Officers across the Services on the Prevalence and Contribution of Mentoring Relationships," *Dissertation Abstracts International: Section B: The Sciences and Engineering* (George Washington University) 68(4-B) (2007), p. 2698.
20. Johnson et al., "Does Mentoring Foster Success?"
21. Georgia T. Chao, Pat M. Walz, and Philip D. Gardner, "Formal and Informal Mentorships: A Comparison on Mentoring Functions and Contrast with Nonmentored Counterparts," *Personnel Psychology* 45 (1992), pp. 619–36; Toby M. Egan and Zhaoli Song, "Are Facilitated Mentoring Programs Beneficial? A Randomized Experimental Field Study," *Journal of Vocational Behavior* 72 (2008), pp. 351–62; Belle R. Ragins and John L. Cotton, "Mentoring Functions and Outcomes: A Comparison of Men and Women in Formal and Informal Mentoring Relationships," *Journal of Applied Psychology* 84 (1999), pp. 529–50.
22. Ragins, Cotton, and Miller, "Marginal Mentoring."
23. Chao, "Formal Mentoring."
24. Egan and Song, "Are Facilitated Mentoring Programs Beneficial?"
25. Chao, "Formal Mentoring"; Chao, Walz, and Gardner, "Formal and Informal Mentorships"; Ragins and Cotton, "Mentoring Functions and Outcomes"; Christina M. Underhill, "The Effectiveness of Mentoring Programs in Corporate Settings: A Meta-analytical Review of the Literature," *Journal of Vocational Behavior* 68 (2005), pp. 292–307.
26. Chao, "Formal Mentoring."
27. Underhill, "Effectiveness of Mentoring Programs," p. 303.
28. Chao, "Formal Mentoring," p. 315.
29. Egan and Song, "Are Facilitated Mentoring Programs Beneficial?"
30. Michael J. Schwerin and Dean E. Bourne, "Mentoring, Satisfaction, and Retention among Navy Medical Service Corps Officers" (paper, annual meeting of the American Psychological Association, San Francisco, California, August 1998).
31. Changya Hu et al. "Formal Mentoring in Military Academies," *Military Psychology* 20 (2008), pp. 171–85.
32. Richard T. Keller et al., "Soldier Peer Mentoring Care and Support: Bringing Psychological Awareness to the Front," *Military Medicine* 170 (2005), pp. 355–61.
33. Martin et al., "Road to Mentoring."
34. Friday and Friday, "Formal Mentoring," p. 153.
35. Allen, Eby, and Lentz, "Mentorship Behaviors."
36. Martin et al., "Road to Mentoring."
37. FM 6-22, pp. 8–14.
38. Johnson et al., "Does Mentoring Foster Success?"; Martin et al., "Road to Mentoring."
39. "Old School Ties," *Time*, 11 May 1942, available at www.time.com/.
40. Puryear, *American Admiralship*.
41. See Johnson and Andersen, "How to Make Mentoring Work."
42. Allen and O'Brien, "Formal Mentoring Programs"; Byrne, Dik, and Chiaburu, "Alternatives to Traditional Mentoring"; Ellen A. Fagenson, "Mentoring—Who Needs It? A Comparison of Protégés' and Nonprotégés' Needs for Power, Achievement, Affiliation, and Autonomy," *Journal of Vocational Behavior* 41 (1992), pp. 48–60; Underhill, "Effectiveness of Mentoring Programs."
43. Monica C. Higgins and Kathy E. Kram, "Reconceptualizing Mentoring at Work: A Developmental Network Perspective," *Academy of Management Review* 26 (2001), pp. 264–88.

44. Egan and Song, "Are Facilitated Mentoring Programs Beneficial?"
45. Ragins, Cotton, and Miller, "Marginal Mentoring."
46. Johnson and Ridley, *Elements of Mentoring*.
47. See Johnson and Andersen, "How to Make Mentoring Work."
48. Edward L. Deci, Richard Koestner, and Richard M. Ryan, "A Meta-analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation," *Psychological Bulletin* 125 (1999), pp. 627–88.
49. Lillian T. Eby, Angie L. Lockwood, and Marcus Butts, "Perceived Support for Mentoring: A Multiple Perspectives Approach," *Journal of Vocational Behavior* 68 (2006), pp. 267–91.
50. *Ibid.*, p. 286.
51. Chao, "Formal Mentoring"; Eby et al., "Does Mentoring Matter?"; Kammeyer-Mueller and Judge, "A Quantitative View of Mentoring Research."
52. Tammy D. Allen, Lillian T. Eby, and Elizabeth Lentz, "The Relationship between Formal Mentoring Program Characteristics and Perceived Program Effectiveness," *Personnel Psychology* 59 (2006), pp. 125–53.
53. Allen, Eby, and Lentz, "Mentorship Behaviors," p. 575.
54. Marc R. Parise and Monica L. Forret, "Formal Mentoring Programs: The Relationship of Program Design and Support to Mentors' Perceptions of Benefits and Costs," *Journal of Vocational Behavior* 72 (2008), pp. 225–40.
55. Connie R. Wanberg, John Kammeyer-Mueller, and Marc Marchese, "Mentor and Protégé Predictors and Outcomes of Mentoring in a Formal Mentoring Program," *Journal of Vocational Behavior* 69 (2006), pp. 410–23.