



Confidence in Ability to Perform Successfully

September 2021

In Brief

Individual and organizational performance—including how organizations respond to unforeseen challenges and opportunities—are greatly influenced by how individual Federal workers think about the consequences of their own actions. MSPB’s 2016 Merit Principles Survey (MPS 2016) addressed this relationship by including six questions about respondents’ confidence in ability to perform successfully (CAPS). Scores derived from these questions summarize the degree to which employees believe their actions and decisions can make a difference to work outcomes.¹ These scores indicated that over half of the Federal workforce surveyed have high confidence in their ability to perform their work tasks effectively and make a difference to those they serve.

What is CAPS?

CAPS is a measure of an employee’s belief that their actions will have the results and outcomes they intend. CAPS is important as Federal work increasingly becomes knowledge work, requiring initiative, innovation, and solving previously unencountered problems.² This brief provides insights about why CAPS scores may relate to job performance and what this means for managing the Federal workforce. It outlines differences in career aspirations of employees who have high and low CAPS scores and differences in how they approach work tasks. The brief concludes by discussing how understanding CAPS can help supervisors manage and develop employees more effectively.

CAPS is more than a privately held belief—it affects behavior. For example, job seekers applying for a Federal job may have various expectations about how their application materials will be evaluated. If they believe their application will be evaluated using a disciplined, merit-based review process, then they may expect that careful preparation of their supporting evidence will be beneficial to their chances. On the other hand, if they believe that jobs will be awarded randomly or that the hiring decision is predetermined in someone else’s favor, there may seem to be little reason for them to behave as though careful work matters. They still might apply hoping for a “lucky win” like someone buying a lottery ticket. But they are likely to just go through the motions without putting forth their best efforts. Even the very best qualified applicants might behave this way.

This principle applies not just to job applicants but also to those already employed. It can shape the way an employee responds to a broad range of work situations. Federal employees who have high CAPS scores (termed “high CAPS employees” hereafter) are more likely to make work plans, expect them to be successful, and carry them out. Employees who believe there is little relationship between what they do and what happens afterward are less likely to set or work

¹ Additional information about MPS 2016 survey administration and construction of the six-question CAPS index is found in Appendix A.

² Robinson, B. (2007). Goodbye clerks, hello knowledge workers. *Federal Computer Weekly*, available from <https://fcw.com/articles/2007/01/08/goodbye-clerks-hello-knowledge-workers.aspx>. See also Sheridan, W. (2008). *How to Think Like a Knowledge Worker*. New York: United Nations Public Administration Network; and GSA (2011). *Knowledge Worker Productivity: Challenges, Issues, Solutions*, available from <https://www.gsa.gov/cdnstatic/KnowledgeWorkerProductivity.pdf>.

toward goals.³ This is supported by research on topics such as self-efficacy,⁴ internal locus of control,⁵ and learned optimism.⁶ There is agreement among researchers that these different labels, resulting from different lines of research which have converged over time, refer to the single underlying characteristic we have referred to as CAPS.⁷ CAPS has shown to be related to improved job performance, greater job satisfaction, more discretionary effort at work, and other positive work outcomes.⁸

CAPS scores can tell us something important about the Federal workforce. There is a familiar stereotype of Federal employees as unmotivated—the profile of an employee with a low CAPS score (“low CAPS employee”). To the extent that this stereotype may be true—and every workforce contains some employees who believe that their actions make little or no difference—the CAPS framework provides a way to understand and perhaps improve the performance of these employees. To the extent that this stereotype is false, this research provides recognition and support for Federal workers who not only feel their actions will help produce results but take personal initiative to make a difference for the public they serve.

CAPS in the Federal Workforce

Based on their CAPS index scores, MPS 2016 respondents were classified as belonging to three CAPS groups: low CAPS (9 percent), medium CAPS (38 percent), and high CAPS (52 percent).⁹ Because the criteria to be categorized as high CAPS is overall agreement of the ability to perform as measured across six different questions, the large percentage of Federal employees in the high CAPS category suggests that Federal employees overall may be more confident in the success of their own efforts than often credited. These CAPS groups do not differ significantly across dimensions such as race, gender, and age.¹⁰

However, the proportion of employees with high CAPS scores *does* differ across some employment circumstances.¹¹ Because survey data is based on correlations, it cannot directly or conclusively identify the reasons for these differences. Indirect evidence, however, suggests a relationship between CAPS and the type of jobs Federal employees have.¹² Because MPS 2016 participants did not provide information about their occupations, we can only examine this relationship indirectly through the relationship between CAPS and several variables logically related to occupation.¹³

³ MSPB (2017). Believing you can make a difference makes a difference at work. *Issues of Merit* 22(1), 5.

⁴ Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215.

⁵ Rotter, J. (1966). Generalized expectancies for internal vs. external control. *Psychological Monographs*, 80 (1), 609. Rotter defines “Locus of Control”—one of the terms under which CAPS is known by researchers—as a “...generalized attitude, belief or expectancy regarding the nature of the causal relationship between one’s own behavior and its consequences.”

⁶ Maier, S. & Seligman, M. (2016). Learned helplessness at fifty. *Psychological Review*, 123(4), 349–367.

⁷ Carifio, J. & Rhodes, L. (2002). Construct validities and the empirical relationships between optimism, hope, self-efficacy, and locus of control. *Work*, 19(2), 125–136.

⁸ Asiedu-Appiah, F. & Addai, H. (2014). An investigation into the causal relationship between employees’ locus of control and contextual performance. *Journal of Business and Behavioral Sciences*, 26(2), 94–118; and Ng, T., Sorensen, K. & Eby, L. (2006). Locus of Control at work: A meta-analysis. *Journal of Organizational Behavior*, 27, 1057–1087.

⁹ Additional information about CAPS index scores and groups is available in Appendix A: Methodology.

¹⁰ See 42 U.S.C. 2000e–16.

¹¹ For ease of discussion this brief reports differences between high CAPS and low CAPS groups, omitting the corresponding percentages for the middle CAPS group. In all cases where a difference is reported, the middle CAPS percentage lies between the high and low CAPS percentages.

¹² Judge, T. A., Bono, J. E. & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology*, 85(2), 237–249.

¹³ Appendix B provides summaries of CAPS differences on dimensions related to occupation.

For example, CAPS scores increase with both increasing level of supervisory responsibility and salary, which are both related to increased levels of job complexity and responsibility. The positive relationship between CAPS and education level is not as straightforward but shows that CAPS differences are related to formal education and therefore to occupation. Whether or not an employee belongs to a union in the Federal sector is determined by whether their occupation is covered by a bargaining agreement rather than by individual employee choice. It is likely that CAPS differences related to union membership, as reported on MPS 2016, are reflective of underlying occupational and organizational differences.

Employees who work in an agency headquarters are also more likely to be in the high CAPS group (36 percent) than in the low CAPS group (29 percent). Conversely, employees stationed away from headquarters (“in the field”) are more prevalent in the low CAPS group (71 percent) than in the high CAPS group (64 percent). This is consistent with a widely held perception that there are more career opportunities available and greater access to organizational resources in headquarters positions. Perhaps these positions are more often sought and obtained by individuals who believe they can act effectively to take advantage of such opportunities. Occupational differences between field and headquarters may play an additional role.

The relationship between CAPS and occupation is complex. On one hand, different occupations involve, by definition, different types of work. Over time, such differences might shape an employee’s beliefs about their ability to be successful at their job. On the other hand, different occupations likely attract individuals with different capabilities, personal characteristics, and attitudes about work—including different levels of CAPS. For practical reasons, this brief focuses on employee CAPS across occupations.

CAPS and Employee Career Paths

Confidence in one’s ability to take effective action seems likely to be related to anticipating the next steps in an employee’s career. The nature of future opportunities matters more when one considers how one’s actions may play a role in how those opportunities play out. In fact, previous research associates CAPS with both the level¹⁴ and the pace¹⁵ of career progression. Our survey data suggest that this may be the case in the Federal workforce as well.

CAPS and Career Aspirations

MPS 2016 asked survey respondents to indicate how likely they were to undertake each of ten career-related actions in the next two years. The responses of the high and low CAPS groups are presented in the table below along with the differences in the percentage of each group likely to pursue each career action.

¹⁴ Cobb-Clark, D. A. & Tan, M. (2011). Noncognitive skills, occupational attainment, and relative wages. *Labor Economics*, 18(1):1–13.

¹⁵ Andrisani, P. (1977). Internal-external attitudes, personal initiative, and the labor market experience of white and black men. *Journal of Human Resources*, 12, 308–328.

Figure 1. Next Steps in Career by CAPS Group

<i>High CAPS more likely to...</i>	High	Low	Difference
Seek new challenges	75%	46%	29%
Seek higher technical responsibilities	60%	45%	15%
Seek leadership responsibilities	44%	32%	12%
Continue in current role	58%	46%	12%
			<i>Low CAPS more likely to...</i>
-25%	13%	38%	Move to different occupation
-22%	13%	35%	Move to different Federal agency
-14%	17%	31%	Move to different organization
-14%	14%	28%	Leave Federal Government
-10%	7%	17%	Reduce work responsibilities
-7%	8%	15%	Reduce work hours
Difference	High	Low	

As shown, high CAPS employees were more likely to remain in their positions or seek new responsibilities and challenges. Conversely, low CAPS employees were more likely to want to reduce responsibilities, reduce hours, or seek to change their jobs. These findings are generally consistent with research conducted outside of the Federal workforce which found that high CAPS employees are more likely to volunteer for tasks that are not part of their formal job role expectations,¹⁶ set more challenging goals,¹⁷ and pursue new opportunities with more complex work.¹⁸

CAPS and Seeking Challenges

The greater likelihood of high CAPS employees to seek greater technical, leadership, and general challenges is consistent with what we know about CAPS. Those with high CAPS believe more strongly that their actions will have the effects they intend. One would naturally be more inclined to seek new challenges if one believed it possible to actively make success happen in a new, less familiar context.

High and low CAPS differences in the responses to other MPS 2016 questions are consistent with high CAPS employees' greater confidence that they can meet new challenges. These challenges include developing new skills and abilities. High CAPS employees were more likely (97 percent) than low CAPS employees (87 percent) to try to learn ways to do their work better and to suggest new or different ways of doing work (88 percent for high CAPS versus 70 percent for low CAPS). High CAPS employees are more likely (91 percent) than low CAPS employees (77 percent) to seek insights about how to do their work even when they are not working. High CAPS employees are also more likely to feel that creativity and innovation are rewarded

¹⁶ Asiedu-Appiah, F. & Addai, H. (2014). An investigation into the causal relationship between employees' locus of control and contextual Performance. *Journal of Business and Behavioral Sciences*, 26(2), 94-118.

¹⁷ Wang, Q., Bowling, N. & Eschleman, K. J. (2010). A meta-analytic examination of work and general locus of control. *Journal of Applied Psychology*, 95(4), 761-768.

¹⁸ Judge, T. A., Bono, J. E. & Locke, E. A. (2000). Personality and job satisfaction: The mediating role of job characteristics. *Journal of Applied Psychology*, 85(2), 237-249.

(57 percent) than low CAPS employees (7 percent). This may be in part due to their belief that creative actions can make a positive difference and not just because the actions and effort are noticed and valued. Consistent with this, high CAPS employees were more likely (78 percent) than low CAPS employees (46 percent) to try creative or innovative things in their work.

These MPS 2016 findings are consistent with previous research showing that high CAPS employees are more likely to participate in general skills improvement training due to a belief that such training is likely to help them take advantage of future opportunities.¹⁹ Similar findings that high CAPS individuals are more likely to invest in development they believe will have an advantage in the future have been found in investigations of educational goals,²⁰ job search,²¹ and plans for self-employment.²²

CAPS and Recognizing Opportunities

High CAPS employees are more likely to report that they are given opportunities to improve their skills in their organization (70 percent) than are low CAPS employees (11 percent). High CAPS employees more often believe they are given sufficient opportunities to earn high performance ratings (79 percent) than do low CAPS employees (21 percent). These results may represent some actual differences in the availability of opportunities. However, given the differences in proactivity characteristic of the two CAPS groups, it may be that the same degree of opportunity is available to both groups, but the high CAPS employees more readily identify opportunities than do lower CAPS employees who see their development as more the responsibility of their employing agency. Low CAPS employees may benefit from supervisors who actively encourage them to seek opportunities they might not otherwise be aware of.

This is consistent with previous research showing that employees with high CAPS showed higher initiative performance and individuals with low CAPS showed higher compliant performance. In other words, high CAPS employees were more likely to initiate actions which resulted in successful performance. Low CAPS employees were more likely to comply with organizational policies and norms which are not directly related to performance. Furthermore, high CAPS employees were more likely to take responsibility for self-development than were low CAPS employees.²³

It is not surprising that employees who report being high CAPS simultaneously report that they: (1) are given opportunities to improve their skills in their organization; (2) take more responsibility for self-development; and (3) are given sufficient opportunities to earn high performance ratings. Improved skills development should correlate with earning higher ratings. But it also appears that CAPS contributes to the belief that these investments are worth the trouble, perhaps creating an important self-fulfilling prophecy. In contrast, a low CAPS employee will be more likely to comply with organizational policies and norms not directly related to performance.

¹⁹ Caliendo, M., Cobb-Clark, D. A., Seitz, H. & Uhlendorff, A. (2016). Locus of control and investment in training. IZA Discussion Papers, No. 10406, Institute of Labor Economics (IZA), Bonn. See also Offerhaus, J. (2013). The type to train? Impacts of personality characteristics on further training participation. SOEP papers on Multidisciplinary Panel Data Research 531, DIW SOEP, Berlin.

²⁰ Jaik, K. & Wolter, S. C. (2016). Lost in transition: The influence of locus of control on delaying educational decisions. Discussion Paper 10191, IZA, Bonn.

²¹ McGee, A. D. (2015). How the perception of control influences unemployed job search. *Industrial and Labor Relations Review*, 68 (1), 184–211.

²² Caliendo, M., Kunn, S. & Weissenberger, M. (2016). Personality traits and the evaluation of start-up subsidies. *European Economic Review*, 86, 87–108.

²³ Blau, G. (1993). Testing the relationship of locus of control to different performance dimensions. *Journal of Occupational and Organizational Psychology*, 66, 125-138.

CAPS and Workplace Withdrawal

Another component of the career aspiration pattern is low CAPS employees' greater preference to reduce work responsibilities and the time they spend at work. For employees more likely to believe they cannot effectively control what happens in their work environment, limiting time spent at work and responsibility for what happens at work might seem reasonable. Coworkers and supervisors might see this avoidant behavior as a form of turnover-in-place.

However, the low CAPS group's greater intention to leave their current organization should be interpreted cautiously. It is consistent with the definition of CAPS and previous research on CAPS and turnover that employees who feel at the mercy of their work environment would seek to escape that environment.²⁴ Yet it is also possible that these preferences reflect a positive decision by low CAPS employees to seek a new environment that is a better fit for their interests, abilities, and overall approach to work. MSPB has explored the factors that affect optimal "fit" between an employee's interests and abilities and their job in a separate research brief based on results from MPS 2016.²⁵ Here, the main point is that CAPS appears to contribute to differences in how Federal employees anticipate the next steps in their careers.

CAPS and Leadership

For some employees, the next envisioned career step involves assuming greater supervisory and leadership responsibilities. MPS 2016 found increasing proportions of high CAPS scores across levels of greater leadership responsibility as follows: Nonsupervisory level (48 percent), team lead (54 percent), supervisor (59 percent), manager (70 percent), and senior executive (79 percent). A similar progression across leadership categories has been found for engagement, job satisfaction and other workforce measures.

Do higher CAPS individuals achieve greater leadership positions, or do those placed more highly in the organization develop higher CAPS and other qualities because of their experiences and the greater resources and attention their organization invests in them? Unfortunately, it is not possible to answer this cause-and-effect question with correlational data. We can examine what the CAPS survey data shows about employee's relationships with their supervisors and what this may mean for employee advancement. Previous MSPB research has highlighted the importance of the relationship between employees and their supervisors. There are some indications that high CAPS employees may be managing this relationship more effectively than their low CAPS colleagues.

First, high CAPS employees seem to have higher regard for their supervisors and others in management roles. More high CAPS employees are satisfied with their supervisors (80 percent) than low CAPS employees (40 percent). More high CAPS employees report being satisfied with upper-level managers (65 percent) than do low CAPS employees (15 percent). For low CAPS employees, the dissatisfaction with senior management is consistent with the view that senior managers are one of the "environment" factors that low CAPS employees feel pressures them and over which they have minimal influence. High CAPS employees, on the other hand, may seize opportunities to develop relationships with potential mentors, believing themselves capable of using these opportunities to achieve their career goals. This more favorable view of leaders may translate to high CAPS employees finding them more approachable, more credible, and make it easier to learn the nature and expectations of leadership roles. Consistent with this, MPS 2016

²⁴ Ng, T. W. H. & Butts, M. M. (2009). Effectiveness of organizational efforts to lower turnover intentions: The moderating role of employee locus of control. *Human Resource Management*, 48(2), 289-310.

²⁵ MSPB (2020). *The Importance of Job Fit for Federal Employees and Agencies*.

data shows that high CAPS employees more often report being comfortable talking to their supervisors about work-related issues (79 percent versus 33 percent).

Second, this positive regard seems to be reciprocated. The table below summarizes MPS 2016 responses indicating that supervisors keep high CAPS employees well informed, treat them with respect, seek their input on decisions, and provide them with more timely and more constructive feedback.²⁶ This is consistent with previous research suggesting that high CAPS facilitates greater socialization to the norms of the employing organization and perhaps greater commitment to its success.²⁷

Figure 2. Employee Satisfaction with Supervisor by CAPS Group

<i>High CAPS employees were more likely to report that...</i>	High CAPS	Low CAPS	Difference
My supervisor keeps me informed about what is expected	92%	57%	+35%
I am treated with respect by my supervisor	91%	55%	+36%
My perspective is sought on important matters	78%	31%	+47%
My supervisor gives timely feedback	75%	37%	+38%
My supervisor gives constructive feedback	71%	33%	+38%

Finally, CAPS may influence an employee's leadership style and effectiveness. Employees who aspire to leadership positions are well served by a high CAPS orientation in seeking that role. Our data suggests that CAPS may shape the style an employee develops while in that role. High CAPS supervisors have different priorities when it comes to task outcomes. Specifically, low CAPS supervisors are much more likely to value completing a task quickly (62 percent versus 48 percent) while high CAPS supervisors show a greater preference for producing a high-quality result (94 percent versus 79 percent) and dealing with coworkers fairly (83 percent versus 46 percent). This suggests that high and low CAPS supervisors may have differences in how they supervise work—and consequently somewhat different effects on the employees they supervise. This pattern also suggests that when agencies mentor, train, and counsel new leaders they should make any organizational expectations about leadership style very clear.

CAPS and How Employees Approach Work

This section discusses how CAPS is related to how employees describe their most important work tasks, what they value most about the outcomes of their work, the abilities needed to accomplish that work, and the factors that contribute most to engagement.

CAPS and Work Tasks

MPS 2016 respondents were asked to describe their most important work task in a brief sentence or phrase. These responses were coded according to whether they involved making something happen in the future (e.g., creating a work plan or working toward completion of the agency's mission) or responding to situations in the present (e.g., working quickly or verifying the accuracy of information). The results showed that high CAPS employees were more likely to characterize their most important work task as future oriented (39 percent) than did low CAPS employees (23 percent). Conversely, low CAPS employees were more likely to characterize their

²⁶ See MSPB (2018). *The Roles of Feedback, Autonomy, and Meaningfulness in Employee Performance Behaviors* for a more in-depth discussion of the role of feedback in employee performance and development.

²⁷ Hung-Wen Lee (2013). Locus of control, socialization, and organizational identification. *Actual Problems of Economics*, 8(146), 322-328.

most important work task as focusing on the present (76 percent) than high CAPS employees did (61 percent).²⁸

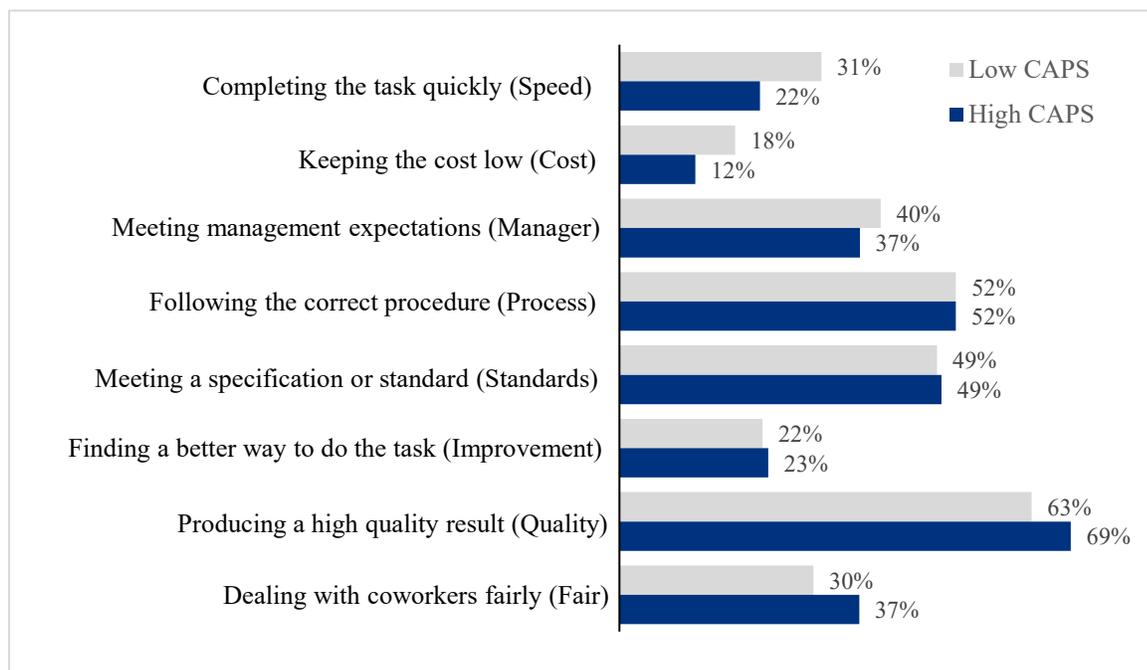
High CAPS and low CAPS employees may describe or frame seemingly identical priorities or task differently. It is possible for the same task to be described in a way consistent with each category. Consider an employee who processes claims at the Social Security Administration. When asked to describe the job's most important task this employee could correctly respond with "I plan my work so that I can finish my cases by the end of the week" or "I process each case I am given as quickly as possible." Either description is a fair representation of the work, but the first involves acting with respect to a future deadline while the second focuses on the present demands only. The first requires greater confidence in one's ability to focus on task outcomes and achieve them successfully. The second describes the same work with less focus on the outcome.

It is important to recognize that there are several factors which contribute to these task descriptions, including the types of jobs respondents have. As discussed previously, MPS 2016 data did not include specifics about occupational series and other respondent information that might have allowed us to examine this factor more closely. In interpreting these results, it is reasonable to conclude that CAPS may make a difference in the kind of occupation a person pursues, the type of work that an employee ends up doing, and how the employee describes that work.

CAPS and Task Outcomes

High and low CAPS employees may think differently about work priorities and outcomes. MPS 2016 presented respondents with eight possible outcomes they might value when completing a work task. Respondents were asked to indicate the importance of each outcome to their most important work task. The outcomes were completing the task quickly, keeping the cost low, meeting a specification or standard, following the correct procedure, dealing with coworkers fairly, meeting the expectations of management, finding a better way to do the task, and producing a high-quality result. The chart below presents the percentage of respondents who valued each task outcome, sorted by the difference between low and high CAPS employees.

²⁸ This pattern holds when the task descriptions of supervisors and nonsupervisory employees are examined separately.

Figure 3. Importance of Work Outcomes by CAPS Group

As shown, low CAPS employees were somewhat more likely than high CAPS employees to consider high speed and low cost important. High CAPS employees were more likely to place a high value on quality and fairness. There are several reasons why low CAPS employees might place a (somewhat) higher value on high speed and low cost. First, they might be less confident that more careful work will make a difference to the result. Second, they might receive feedback or other cues that indicated that minimizing time and cost is valued over outcomes such as quality or customer satisfaction. Conversely, it makes theoretical sense for high CAPS employees to prioritize quality if they believe that it is within their power to achieve.

Survey results also reveal differences in how high and low CAPS employees experience or approach job performance and performance appraisal. High CAPS employees were more likely than low CAPS employees to receive the highest performance rating in their rating system (58 percent versus 38 percent). They more frequently regarded their most recent performance appraisal as fair (77 percent versus 28 percent) and were more likely to believe that the standards used to appraise their performance were appropriate (71 percent versus 18 percent). They judge that their performance appraisal was useful in acknowledging their strengths (68 percent versus 29 percent) and identifying their weaknesses for future improvement (54 percent versus 22 percent). Likely because they respect the process and value the information it provides, high CAPS employees are much more likely to report that they understand what they need to do to receive a high performance rating (81 percent versus 37 percent).

There are many factors that influence the effectiveness of performance evaluations, both how supervisors conduct them and how employees respond to them.²⁹ These results suggest that one such factor is the degree to which employees believe performance outcomes (and ratings) are driven by individual decisions and actions. If so, then employees' CAPS may also affect how they react to performance feedback and incentives, and the extent to which performance appraisal can motivate or energize employees as our data suggests it may. High CAPS respondents were

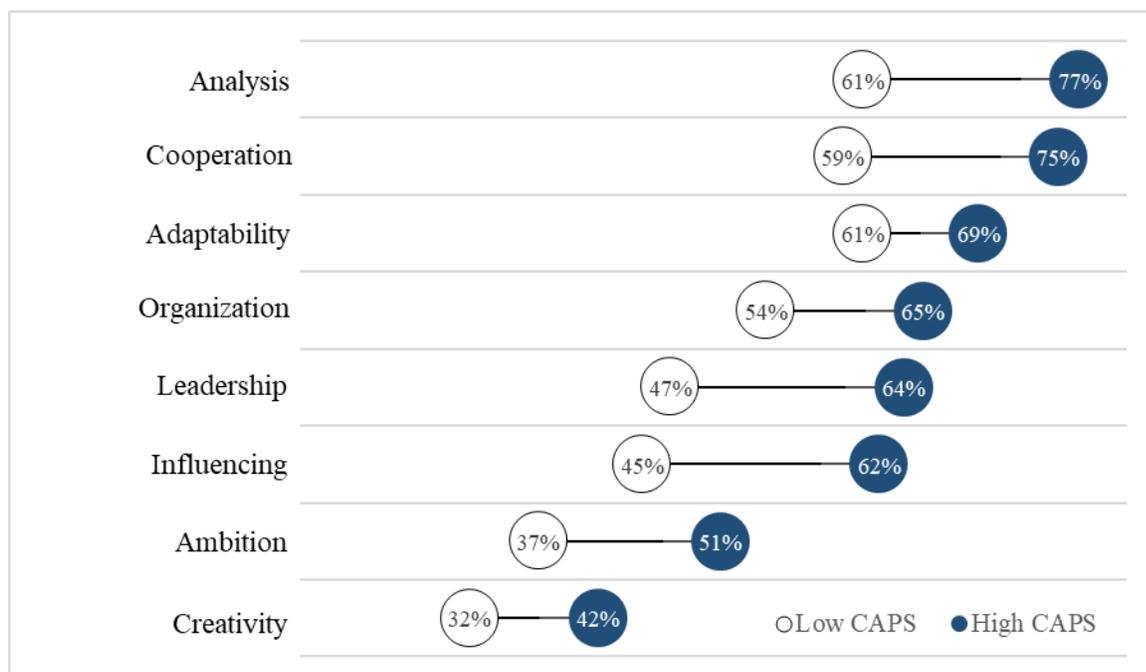
²⁹ Speer, A. B., Tenbrink, A. P. & Schwendeman, M. G. (2020). Creation and validation of the Performance Appraisal Motivation Scale (PAMS). *Human Performance*, 33(2-3), 214-240.

more likely (56 percent) than low CAPS respondents (16 percent) to report that their performance appraisal makes them feel more enthused about their job.³⁰

CAPS and Competencies

MPS 2016 asked respondents to consider their most important task and indicate which of eight general competencies were important to performing it. These eight competencies were based on a multi-occupation analysis of work-related abilities designed to identify a core set of general competencies which enable an employee to do related tasks.³¹ The competencies were Leadership, Cooperation, Influencing, Analysis, Creativity, Organization, Adaptability, and Ambition. The chart below presents the responses of nonsupervisory employees, showing the percentage of respondents who considered the competency important to performing their most important job task.

Figure 4. Importance of Selected Competencies to Performance by CAPS Group



Notably, the high CAPS group considered *all* eight competencies more important than did the low CAPS group. This pattern suggests that a low CAPS employee may be less likely to believe that skill is important, actively use those skills to tackle job assignments, or pursue training that does not clearly support an immediate requirement. This is consistent with a low CAPS perspective: if one's actions do not make much of a difference, then individual capability and competencies in general become less important.

CAPS and Engagement

Previous research has found that CAPS positively correlates with job satisfaction.³² Consistent with this research, high CAPS employees who participated in MPS 2016 reported greater job satisfaction (84 percent) than low CAPS participants (22 percent). MSPB has investigated

³⁰ There is some indication that a work setting that includes performance appraisals is more of an attractor for high CAPS employees. See Heywood, J. S., Jirjahn, U. & Struewing, C. (2017). Locus of control and performance appraisal. *Journal of Economic Behavior & Organization*, 142, 205-225.

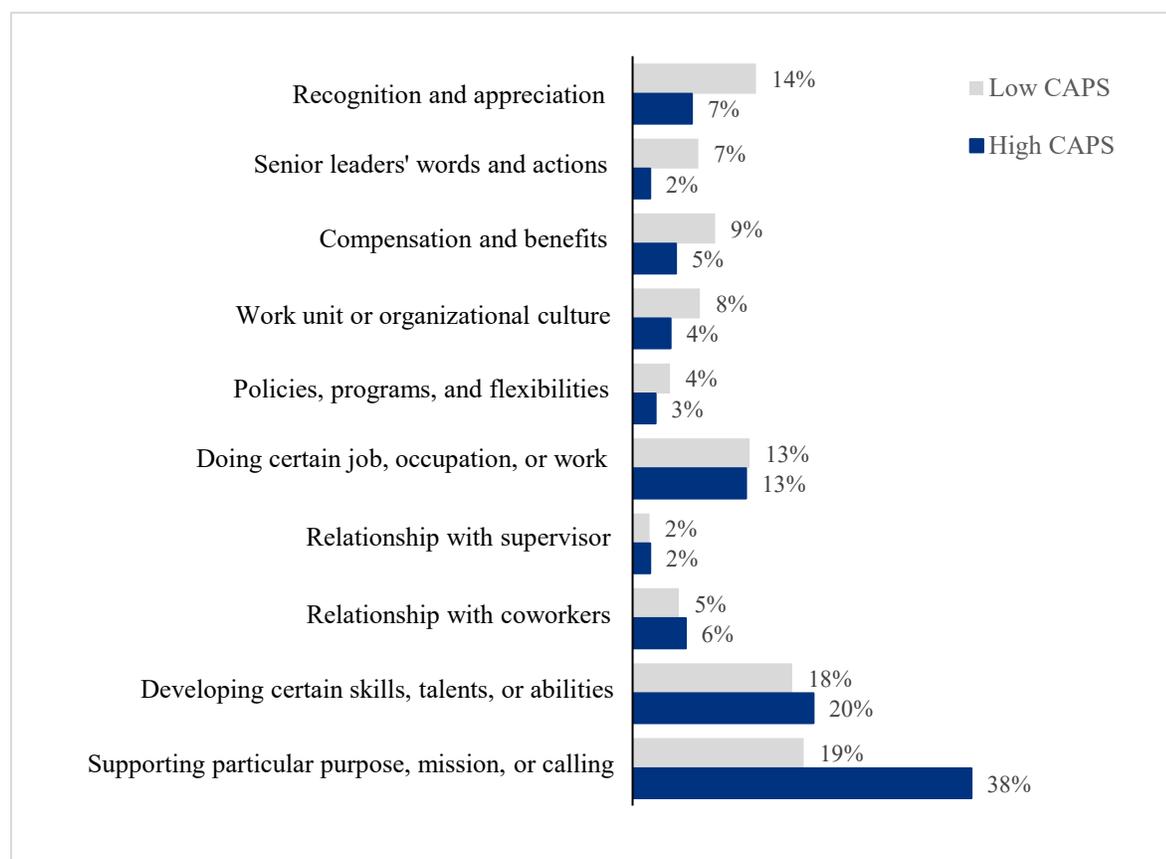
³¹ Bartram, D. (2005). The Great Eight Competencies: A criterion-centric approach to validation. *Journal of Applied Psychology*, 90(6), 1185-1203.

³² Labuschagne, M., Bosman, J. & Buitendach, J. H. (2005). Job insecurity, job satisfaction and work locus of control of employees in a government organization. *Journal of Human Resource Management*, 3, 26-35.

employee engagement,³³ finding that highly engaged employees usually report high levels of job satisfaction, but that less engaged employees may have either high or low job satisfaction. In other words, job satisfaction is a necessary component of engagement, but alone does not assure it. Our examination of CAPS showed that high CAPS employees are more likely to report being engaged in their job (92 percent) than low CAPS employees (42 percent).

MPS 2016 expanded on earlier engagement findings by asking respondents which of eight factors most motivate them to engage in their work. As illustrated in the chart below, there are differences between high and low CAPS groups. The eight factors are ordered by high and low CAPS differences with factors more favored by low CAPS survey respondents at the top and those more favored by high CAPS respondents on the bottom.

Figure 5. Importance of Selected Engagement Factors by CAPS Group



While some of these differences are small, the overall pattern is suggestive. It makes sense that high CAPS employees place greater value on their agency's mission since they are more likely than low CAPS employees to believe their actions can contribute to it. A chance to develop their skills is valuable only when a person believes that invested effort has a high likelihood of yielding success. The things that matter more to low CAPS employees are all aspects of their work environment. If the low CAPS employees believe that external factors (i.e., environment) determine their success, then the nature of those external factors becomes more important to their work experience. These factors are less important to high CAPS employees because they see their own choices and actions as material, affecting both their performance and their broader work environment.

³³ MSPB (2008). *The Power of Federal Employee Engagement*.

These findings are consistent with previous research indicating that high and low CAPS employees see work incentives,³⁴ motivation, and rewards differently.³⁵ For example, high CAPS employees are more likely to see linkages between their actions and future effects and rewards, but this may not lead to increased performance if the high CAPS employees do not *value* the rewards available.³⁶ High CAPS employees have been found to be more motivated by factors intrinsic to their work rather than by external rewards.³⁷ A 2012 MSPB report discusses how motivation to perform depends on employees seeing a strong connection between (1) their effort, (2) their performance resulting from that effort, and (3) the value of the reward received for that performance.³⁸ The results demonstrated that any weakness in these linkages can reduce performance motivation.

Managing with CAPS in Hand

The previous sections outlined the nature of CAPS and shown how in the Federal workforce it is related to employee career aspirations and how employees approach work. How can we use this information? This section suggests several strategies supervisors can use to manage employees using what we have learned about CAPS.

CAPS and Work Environments

When supervisors believe they see low CAPS in an employee, they should first consider whether this is a characteristic of the workplace or the work itself rather than the individual employee. People may exhibit low CAPS because of the management style, organizational culture, or other aspects of their work or work environment.³⁹ For example, employees who work in an organization that takes a rigid, “by the book” approach to every task and project will likely, over time, attempt fewer innovations or other individual actions intended to improve their work processes.

Differences in CAPS profiles across agencies suggest that organizational factors may influence the workforce’s beliefs about their ability to act effectively. Using our survey data, we calculated average CAPS scores for each agency that participated in MPS 2016 and classified them into CAPS groups using the same procedure we used to classify individuals. Although there were no agencies in the low CAPS category, the distribution of agencies between the top two groups (67 percent medium CAPS and 33 percent high CAPS) suggests that there may be agency cultural factors in play that influence individual CAPS.

These differences may develop directly through work experiences that affect CAPS or less directly as low or high CAPS applicants are attracted to and retained by organizational environments they find most suitable. Further, factors such as the nature of production environments or constraining policies and procedures may play a role. When CAPS is a function of the environment a different

³⁴ Cobb-Clark, D. A. (2015). Locus of control and the labor market. *Journal of Labor Economics*, 4(3), 1-19.

³⁵ Kormanik, M. B. & Rocco, T. S. (2009). Internal versus external control of reinforcement: A review of the locus of control construct. *Human Resource Development Review*, 8(4), 463-483.

³⁶ Spector, P. E. (1982). Behavior in organizations as a function of employees’ locus of control. *Psychological Bulletin*, 91(3), 482-497.

³⁷ Labuschagne, M., Bosman, J. & Buitendach, J. H. (2005). Job insecurity, job satisfaction and work locus of control of employees in a government organization. *Journal of Human Resource Management*, 3, 26-35.

³⁸ MSPB (2012). *Federal Employee Engagement: The Motivating Potential of Job Characteristics and Rewards*.

³⁹ Johnston, R. E., Rosen, C. C., Chang, D. & Lin, J. (2015). Getting to the core of locus of control: Is it an evaluation of the self or the environment? *Journal of Applied Psychology*, 100(5), 1568-1578.

set of issues come into play relating to job design and job fit.⁴⁰ Strategies related to these issues should be considered rather than focusing solely on the individual employee.

Improving Communication

Effective communication between employees in the workplace is a key component of organizational success. It is particularly important between employees and their supervisors, as MSPB research has confirmed.⁴¹ MPS 2016 helped us to identify several of the ways nonsupervisory employees, supervisors, and senior executives may miscommunicate about work outcomes. For example, we found that supervisors and other leaders place a higher value on finding new ways to do a task while nonsupervisory employees were more focused on working quickly, following correct procedures, and meeting a specification or standard.⁴² This is consistent with the differences between high and low CAPS employees in outcome valuing reported in this brief. It is also consistent with the tendency for those in or aspiring to supervisory or leadership positions to have more of a high CAPS perspective.

Taken together, the implications of these findings are that high and low CAPS employees—regardless of supervisory responsibility level—see their work outcomes differently and this may affect the way they work together. Miscommunication can be reduced when supervisors identify such differences and clarify the relative importance of different task outcomes. This can be accomplished by a supervisor who understands the nature of CAPS without directly discussing CAPS with the employee. Including information about CAPS in supervisor training is one way to encourage this.

Potential of Low CAPS

When a supervisor believes they have a low CAPS employee and it seems to be a characteristic of the employee rather than the work environment, it is appropriate to consider the employee's strengths. There has been little research on advantages of a low CAPS perspective. It does suggest that low CAPS employees perform better in work environments with well-defined roles and expectations than they do in more open-ended environments. They may be more comfortable with team member and supporting roles rather than leading work teams. They may be at their best in job roles and environments like those described above in which there is in fact less employee control over the environment. Low CAPS employees may fit more comfortably into the kinds of work situations that high CAPS employees may find frustrating.⁴³

Even so, it may be that the most important aspect of a low CAPS perspective is that it can be developed into a high CAPS perspective. CAPS falls into the middle category of MSPB's competency trainability framework.⁴⁴ It is neither easily trainable like factual knowledge nor very difficult to change like personal traits such as resilience. Without intervention, however,

⁴⁰ See MSPB (2012). *Federal Employee Engagement: The Motivating Potential of Job Characteristics and Rewards*; and MSPB (2020). *The Importance of Job Fit for Federal Agencies and Employees*.

⁴¹ MSPB (2010). *A Call to Action: Improving First-Level Supervision of Federal Employees*.

⁴² MSPB (2019). What are the most important work outcomes? *Issues of Merit* 24(3), 4.

⁴³ Hackman, J.R. & Oldham, G.R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60, 159-170; and Hackman, J.R. & Oldham, G.R. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31(2-3), 463-479.

⁴⁴ MSPB (2011). *Making the Right Connections: Targeting the Best Competencies for Training*.

employees with low CAPS are likely to persist in this perspective indefinitely.⁴⁵ One reason to believe that such change is possible is that CAPS has been found to differ in the same person across different aspects of their life. Our CAPS index focused on CAPS at work because it is most relevant to job performance. But CAPS affects other areas of life as well. CAPS-related attitudes and actions have been documented in areas such as medical treatment,⁴⁶ mental health treatment,⁴⁷ creativity,⁴⁸ customer service,⁴⁹ and sports performance.⁵⁰ That such attitudes have developed differently in varying domains of experience indicates that change is possible.

Why try to increase CAPS? Those who think their own actions are not linked to results from those actions are, quite simply, less likely to act at all. For both personal reasons (the benefit of the individual low CAPS employee) and practical ones (the organizational resistance to removing a poorly performing employee in the public sector⁵¹) it may be preferable to help the low CAPS employee tip their CAPS upward. How can this be done?

Developing High CAPS

A first step toward increasing CAPS can be a management style and a work environment that allows, encourages, and supports greater autonomy in how employees perform their work. MSPB has recognized the value of granting employees greater autonomy in how they perform their work.⁵² CAPS highlights that this alone may not be sufficient. Employees can be allowed to direct many aspects of their work, but if they lack confidence in their ability to make any impact, they may respond to this opportunity with indifference and inactivity. Fortunately, there is reason for optimism that personal characteristics like low CAPS can respond to direct improvement efforts.⁵³

Research suggests that some employees can think in a more high-CAPS way in the workplace simply by being encouraged to consider the possibility that they have greater control over the outcomes of their work than they have assumed. For example, one study of job search strategies found that differences between high and low CAPS job searchers disappeared—the low CAPS searchers improved performance to match the high CAPS searchers—when they were given information about how their efforts led directly to increased opportunities.⁵⁴ Sometimes greater transparency about different views of the relationship between actions and outcomes is all that is needed. This suggests that introducing CAPS into performance discussions between employees

⁴⁵ Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control and the theory of planned behavior. *Journal of Applied Social Psychology*, 32, 665–683. There are some indications of gradual increases in CAPS over the lifespan. See Cobb-Clark, D. A. & Schurer, S. (2012). The stability of big-five personality traits. *Economics Letters*, 115(1), 11–15.

⁴⁶ Richard, S., Dionne, C. E. & Nouwen, A. (2011). Self-efficacy and health locus of control: Relationship to occupational disability among workers with back pain. *Journal of Occupational Rehabilitation*, 21(3), 421-430.

⁴⁷ Hill, D. J. & Bale, R. M. (1980). Development of the mental health locus of control and mental health locus of origin scales. *Journal of Personality Assessment*, 44(2), 148-156.

⁴⁸ Malik, M. A. R., Butt, A. N. & Choi, J. N. (2015). Rewards and employee creative performance: Moderating effects of creative self-efficacy, reward importance, and locus of control. *Journal of Organizational Behavior*, 36, 59-74.

⁴⁹ Pollack, B. L. (2013). Satisfaction and customer loyalty link: The moderating role of service locus of control. *Services Marketing Quarterly*, 34, 18-33.

⁵⁰ Tsai, J. & Hsieh, C. (2015). Development of the children's sport locus of control. *Social Behavior and Personality*, 43(2), 315-326.

⁵¹ MSPB (2019). *Remedying Unacceptable Employee Performance in the Federal Civil Service*.

⁵² MSPB (2018). *The Roles of Feedback, Autonomy, and Meaningfulness in Employee Performance Behaviors*.

⁵³ Gutman, L. M. & Schoon, I. (2013). The impact of non-cognitive skills on outcomes for young people: Literature review. Education Endowment Foundation, London, available at <http://hdl.voced.edu.au/10707/287500>.

⁵⁴ McGee A. (2014). How the perception of control influences unemployed job search. *Industry Labor Relations Review*, doi:10.1177/0019793914556245.

and their supervisors can make a difference.⁵⁵ It need not involve the conceptual vocabulary introduced in this brief. Instead, a discussion of what is and is not going well in the workplace can cover the employee's assumptions about what effects performance can have and how it may be hindered. This brief's finding that low CAPS employees value recognition can be leveraged by supervisors when they not only praise employees for success but highlight the link between success and what actions the employee has taken that contributed to it.

Employees can benefit from work assignments that highlight the results of actions and the ability of employees to make a difference in the outcomes of their work. Consider a low CAPS employee who works in the back office of a Department of Motor Vehicles. The employee has no direct experience with effects of the forms processed each day. The employee's supervisor, who has worked in this setting longer and is familiar with the overall workings of the department, has a performance discussion with the employee and has observed a low-CAPS orientation developing. The supervisor wisely assigns the employee to work several weeks at the desk where paperwork is finalized for student drivers who have just passed their driving tests. Not only can the employee see that the tasks performed are making a difference, but this is reinforced by a stream of elated teenagers and relieved older people these tasks have helped. This contrived example is a simplification of more complex employee development scenarios that supervisors may implement in the workplace.

For employees whose workplace cannot offer such opportunities, there are training strategies that emphasize the relationship between action and results and can raise confidence in one's ability to act effectively.⁵⁶ Training that emphasizes the links between actions and outcomes as well as how to recognize when such links are and are not present can be beneficial in increasing CAPS. Such training can be found as a component of assertiveness training, behavioral modeling, self-awareness training, and cognitive therapy to overcome self-defeating beliefs about one's ability to act effectively.⁵⁷ Game-like computer simulation experiences have also been shown to be one way to accomplish this training.⁵⁸

CAPS and Training Transfer

CAPS may have useful implications for increasing transfer from training to performance on the job. It is widely recognized that even well-designed, effectively delivered, job-relevant training may not result in improved performance if the recently trained employee does not have the opportunity to apply the new skills at work.⁵⁹ In some situations such opportunities may be present, but the employee does not recognize them as such. This situation may be more common for low CAPS employees who may not attempt to transfer improved skills because they do not expect their actions to affect workplace outcomes. In addition, as discussed in the *CAPS and Recognizing Opportunities* section above, the low CAPS employee may be slower to recognize opportunities for improvement in the first place.

⁵⁵ This is yet another reason to suggest that such performance discussions take place frequently rather than being limited to end-of-year performance reviews. See MSPB (2015). *Performance Management is More Than an Appraisal*.

⁵⁶ Seligman, M. (2006). *Learned Optimism*. New York, NY: Random House; Long, D. (2012). *Third generation leadership and the locus of control*. New York, NY: Routledge; and Craske, M. G. (2010). *Cognitive-Behavioral Therapy*. American Psychological Association.

⁵⁷ Asiedu-Appiah, F. & Addai, H. (2014). An investigation into the causal relationship between employees' locus of control and contextual performance. *Journal of Business and Behavioral Sciences*, 26(2), 94-118.

⁵⁸ Swink, D. F., & Buchanan, D. R. (1984). The effects of sociodramatic goal-oriented role play on locus of control. *Journal of Clinical Psychology*, 40(5), 1178-1183.

⁵⁹ Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review*, 6(3), 263-296.

Training effectiveness research has shown that high CAPS is associated with greater transfer of training to the job setting.⁶⁰ Supervisor interventions to raise CAPS by emphasizing the link between employee behaviors and workplace results may increase training transfer and thereby increase its value to the organization. Such interventions can be particularly effective when the action-to-consequences links are made, not just through general examples, but using the skills addressed by training and the performance outcomes valued in the workplace. This approach can benefit all employees but may be of greatest value to those with low CAPS.

Challenges of High CAPS

High CAPS can have some potential downsides. Although research has shown that high CAPS employees generally experience lower levels of job stress,⁶¹ there are some circumstances in which they may be at risk for higher stress. For example, frustration and discouragement can develop when high CAPS individuals find themselves in the kind of high structure/low control environments that are comfortable or familiar to their low CAPS colleagues. High CAPS performers are prone to stress when they believe they can control aspects of their work environment they really cannot. Supervisors should watch for this and be prepared to ameliorate its effects with thoughtful job design and realistic expectation setting.

It is encouraging to observe in the MPS 2016 results that there is no indication that high CAPS employees in our sample are experiencing CAPS-related stress. High CAPS employees are more likely to report they are satisfied with the level of job stress (59 percent) than low CAPS employees (16 percent). This is a positive finding, but it may require additional research to explain. It is possible that the Federal Government's greater emphasis on work-life balance than nongovernmental employers and other related factors provide a buffer against such stress.

Research has shown that high CAPS employees can be "difficult" in ways related to their CAPS profile. One study reportedly found them to be "less susceptible to influence, less easily persuaded, and less likely to conform" than their low CAPS colleagues.⁶² Whether this is a positive or negative aspect may vary with the supervisor's management style, the functional value of rule-following or conformity, and other workplace factors.

⁶⁰ Quratulain, S., Khan, A. K., Sabharwal, M. & Javed, B. (2021). Effect of self-efficacy and instrumentality beliefs on training implementation behaviors: Testing the moderating effect of organizational climate. *Review of Public Personnel Administration*, 41(2), 250-273.

⁶¹ Chen, J. C. & Silverthorne, C. (2008). The impact of locus of control on job stress, job performance and job satisfaction in Taiwan. *Journal of Organizational Behavior* 29(5), 572-582.

⁶² Avtgis T. A. (1998). Locus of control and persuasion, social influence, and conformity: A meta-analytic review. *Psychological Reports*, 83, 899-903.

In Summary

This brief discussed employee CAPS and its relationship to career paths, work tasks, task outcomes, work-related competencies, and employee engagement. The brief then presented several implications of CAPS for managing work and employee counseling and development, summarized in the table below.

Figure 6. Implications of CAPS for Supervising Employees

Planning	<ul style="list-style-type: none"> • Assess whether low CAPS is due to the work environment, suggesting job redesign—or a characteristic of the employee, suggesting employee development. • Consider the relative strengths of low and high CAPS employees when assigning work, offering developmental opportunities, and counseling employees about career planning.
Working	<ul style="list-style-type: none"> • Consider and discuss CAPS to facilitate improved communication among nonsupervisory employees and between employees and supervisors. • Recognize that fast-changing and other low-control environments may be stressful for high CAPS employees and seek ways to support those employees.
Developing	<ul style="list-style-type: none"> • When higher CAPS is valuable, consider steps such as (1) exposing employees to work situations where their actions have immediate and tangible outcomes; and (2) providing training where employees identify connections between actions and outcomes. • Emphasize links between employee actions and outcomes to aid training transfer to the work setting, particularly for low CAPS employees.

Appendix A: Methodology

Merit Principles Survey 2016

MSPB periodically administers a Governmentwide Merit Principles Survey (MPS) to monitor Federal agency compliance with Merit System Principles and to assess the general wellbeing of the Federal workforce. MSPB has conducted the MPS periodically for more than 35 years. Each MPS contains some questions that are asked in multiple administrations to track perceptions and some questions that are unique to a single survey administration.

MPS 2016 was administered in July–September 2016. To reduce the demands on survey respondents, it was divided into three paths so that all respondents would be asked only a fraction of the total number of questions. The data discussed in this brief comes from “Path 2” of that survey. Overall, 37,397 civilian employees were invited to respond to Path 2 and 14,473 responded, for a response rate of 38.7%. While the margin of error can vary by question, the margin of error on Path 2, with a 95% confidence interval, ranges from 0.50% to 4.40%.⁶³

Confidence in Ability to Perform Successfully (CAPS) Index

Originally, ten candidate CAPS questions were included on MPS 2016 in the Work Context section. Each question presented a statement along with a 5-point agreement/disagreement scale. Half of the statements were worded such that agreement indicated high CAPS and half were worded so that agreement indicated low CAPS. In the table below, “High” indicates a high CAPS statement and “Low” indicates a low CAPS statement. Prior to analysis, responses to the low CAPS items were recoded so that all items indicated high and low CAPS in the same way. Specifically, in the low CAPS statement, the recoding was as follows: 1 to 5; 2 to 4; 4 to 2; 1 to 5; and no change for a 3 (a response of “neither agree nor disagree”). After this recoding, higher numbers indicated higher CAPS and lower numbers indicated low CAPS for all questions.

Consistent with accepted scale construction procedures⁶⁴ the correlations between responses to these ten questions were examined using a principal component factor analysis. Based on this analysis, the CAPS index was reduced to 6 items which are summarized reasonably by a single factor and have a Cronbach’s alpha reliability of 0.71.⁶⁵ These scale properties compare favorably to those of scales used in previous research on CAPS-related constructs.⁶⁶ The first six items in the table below were retained in the CAPS index. The last four items in the table were not included.

The 5-point ratings for the final six questions were averaged to assign each survey respondent a CAPS index score. This CAPS index score was used to divide survey respondents into low, medium, and high CAPS groups. Respondents with scores less than or equal to 2.5 were classified as low CAPS; those with scores between 2.5 and 3.5 were considered middle CAPS,

⁶³ For more information about MPS 2016 and how it was administered, see MSPB’s Freedom of Information Act electronic reading room (e-FOIA) at www.mspb.gov.

⁶⁴ DeVellis, R. (2017). *Scale Development: Theory and Applications (4th Ed.)*. Thousand Oaks, CA: Sage; and Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy Beliefs of Adolescents*, 5(1), 307-337.

⁶⁵ Henson, R. K. (2001). “Understanding internal consistency reliability estimates: A conceptual primer on coefficient alpha. *Measurement and Evaluation in Counseling and Development*, 34(3), 177-190.

⁶⁶ The relatively small number of items in the MPS 2016 CAPS index is typical of space-constrained survey research on this topic. (See, for example, Cobb-Clark, D. A. (2015). Locus of control and the labor market. *Journal of Labor Economics*, 4(3), 1-19.) For a selection of full-length measures suitable for individual use, see Hill, R. (2011). *The Locus of Control Construct’s Various Means of Measurement*. Will to Power Press: Beach Haven, NJ.

and those with scores greater than or equal to 3.5 were considered high CAPS. This research brief examines differences in how these groups responded to other MPS 2016 questions to better understand the role CAPS may play in Federal work.

Figure 7. Survey Items Considered for CAPS Index and Associated CAPS Level

Level	Index Question
Low	There is little point in setting goals at work because so much happens that I cannot control.
High	If I set a goal at work, I can achieve that goal with hard work and determination.
Low	The responsibility for an employees' career advancement lies mostly with the employing organization.
High	The responsibility for an employee's career advancement lies mostly with the employee.
Low	Success at a job like mine is determined mostly by things outside of the employee's control.
High	Most employees in a job like mine have it within their power to succeed at their job.
Low	When there is a new workplace policy, it should be implemented quickly to make things better.
High	Existing workplace policies should be changed cautiously to avoid making things worse.
Low	It is important to closely direct employees' work, so they do not make bad decisions.
High	It is important to let employees choose how to do their work, even if they sometimes make bad decisions.

Appendix B: CAPS Differences by Dimensions Related to Occupation

The table below shows the percentage of MPS 2016 respondents who were low CAPS and high CAPS for selected demographic dimensions that are related to occupation or work role.—

Leadership Role	Low CAPS	High CAPS
Non-Supervisor	11%	48%
Team Leader	11%	54%
Supervisor	6%	59%
Manager	4%	70%
Senior Executive	2%	79%
Education Level	Low CAPS	High CAPS
Less than High School	— ⁶⁷	77%
High School or GED	8%	47%
Some College	11%	44%
Associate Degree	10%	49%
Bachelor's Degree	9%	53%
Master's Degree	8%	61%
Professional Degree	21%	52%
Ph.D. or equivalent	22%	63%
Yearly Salary	Low CAPS	High CAPS
Less Than \$25,000	28%	44%
\$25,000 to \$49,999	10%	43%
\$50,000 to \$74,999	11%	48%
\$75,000 to \$99,999	10%	52%
\$100,000 to \$124,999	8%	59%
\$125,000 to \$149,999	9%	60%
\$150,000 to \$174,999	5%	68%
\$175,000 or More	20%	56%
Union Membership	Low CAPS	High CAPS
Yes	14%	42%
No, Position Covered	12%	51%
No, Don't Know If Covered	9%	52%
No, Not Covered	7%	60%
Administrative Location	Low CAPS	High CAPS
Headquarters	8%	55%
Field	11%	51%

⁶⁷ There were no low CAPS survey respondents at this level of education.