Article

Aligning Individual and Organizational Performance: Goal Alignment in Federal Government Agency Performance Appraisal Programs

Rebecca S. Ayers[1]

Abstract

Performance appraisal programs are touted as a management control tool for implementing organizational goals and driving organizational performance but how these programs do that has not been evaluated. This research examines the extent to which goal alignment in federal agency performance appraisal programs enhances organizational performance. Two aspects of goal alignment are explored: actual embedding of organizational goals in performance plans (plan alignment) and employees' knowledge of how their work relates to the agency's goals and priorities (employee alignment). Results indicate employee alignment increases organizational performance whereas plan alignment does not. Strategic management proponents should take note of this outcome. Furthermore, the overall quality of a performance appraisal program moderates the alignment and organizational performance relationship. Under conditions of high- and low-performance appraisal program expectations, employee alignment can influence organizational performance, but not as expected.

[1]U.S. Office of Personnel Management, Apex, NC, USA

Corresponding Author:
Rebecca S. Ayers, Manager, Performance Management Solutions, HR Solutions, U.S. Office of Personnel Management, 7117 Meadow Gate Drive, Apex, NC 27502, USA.
Email: Rebecca.Ayers@opm.gov

A U.S. Government Accountability Office (GAO; 2008) report recently suggested a key to improving government through performance information is to create a "clear line of sight linking individual performance with organizational results" (p. 9). Public managers likewise agree that performance appraisal programs can be used as a management tool for controlling organizational performance (Pulakos & O'Leary, 2011). Human resource management research has examined intrinsic and extrinsic motivational factors that affect organization performance, such as pay-for-performance (Kellough & Selden, 1997; Park & Berry, 2014), at-will employment (Kellough & Nigro, 2002), merit pay (Gabris & Ihrke, 2000; Kellough & Lu, 1993; Taylor & Pierce, 1999), and the system itself (Oh & Lewis, 2009). However, one component of performance appraisal programs that has received limited empirical attention is the ability of such programs to create goal alignment. Goal alignment is defined as linking individual goal outcomes with organizational goal outcomes. When individual performance requirements cascade from organizational strategic plan goals, it can enhance organizational performance, assuming the goals and achievement of goals affect performance. This research tests this theory by examining goal alignment in federal agency performance appraisal programs and organizational performance. This research hypothesizes that if performance appraisal programs align with agency strategic plans and ensure key goals and objectives are embedded in the performance appraisal plans, employees will more likely understand and contribute to achieving the key goals and objectives, thus ultimately leading to increased organizational performance. However, goal alignment in a performance appraisal program may be moderated by other performance appraisal factors. Goal alignment alone may not fully contribute to increased organizational performance, factors such as credible measures that demonstrate expected results, distinctions in levels of performance, consequences for action and non-action, employee involvement, feedback and dialogue, and training may further contribute to organizational performance.

Examining this relationship has important implications for the theory of public management, performance management, and strategic human resources management. Performance management does not always work as we expect, but it can have positive impacts (Moynihan, 2008), and public management impacts are not trivial (O'Toole & Meier, 2011). This research contributes to understanding processes within public-sector management and how public managers can improve agency performance through strategic management (Walker, 2013).

Literature Review

Organizational Performance

Researchers have attempted to develop a model to explain public organizational performance and generally agree that any measures of organizational performance must be multidimensional (Boyne & Dahya, 2002; Boyne, Gould-Williams, Law, & Walker, 2002; Brewer & Selden, 2000; Chun & Rainey, 2005; Ingraham, Joyce, & Donahue, 2003; Pandey & Rainey, 2006; Rainey & Steinbauer, 1999; Wolf, 1993). The Office of

Management and Budget's (OMB) Program Assessment Rating Tool (PART) was created to measure agency program performance on a variety of elements: program purposes and design, strategic planning, management, and results. Because each government program is unique, OMB measured the program against performance standards designed for measuring specific program outcomes. This individual approach to program performance where programs are measured against expected outcomes makes PART unique as a measure of organizational performance.

OMB's use of PART from 2004 to 2008 has meant limited use by scholars as a measure of organizational performance when examining federal agencies. Most research using PART concentrates on PART's usefulness as a performance budgeting tool (Gilmour, 2007; Gilmour & Lewis, 2006a; Moynihan, 2008; Mullen, 2006; Posner & Fantone, 2007; GAO, 2005; White, 2012). Some find it to be a subjective measure, perhaps driven by the political content of the programs (Gilmour & Lewis, 2006b) or partisan politics (Moynihan, 2008) and the "Results Not Demonstrated" rating to be a misnomer (Gueorguieva et al., 2009). PART results have been successfully linked to federal agency strategic planning and goal properties (Jung & Lee, 2013) and used to assess public leadership (Fernandez, Cho, & Perry, 2010). Although most programs use only internal measures as evidence of performance, OMB and the agencies have attempted to seriously evaluate performance (Heinrich, 2012). PART is currently the only applicable measure available that provides a consistent approach to evaluating hundreds of Federal Government programs at the program level. PART scores can be used to compare performance across a range of federal agencies and should be less subjective than typical measures based on internal perceptions.

Goal Alignment

Establishing goal alignment in organizational management systems is critical for increasing organizational performance (Kaplan & Norton, 1992; Olian & Rynes, 1991). Although not thoroughly established in literature as "goal alignment," the concept is supported in strategic management and goal setting theories. Strategic management literature supports the concept that alignment of priorities leads to increased performance (Joshi, Kathuria, & Porth, 2003; Walker, 2013), but only recently has public management literature empirically tested the relationship in public organizations. From a principal-agency theory perspective, vertical strategic alignment leads to better performance (Andrews, Boyne, Meier, O'Toole, & Walker, 2012), and different levels of hierarchy play an important role in the strategy process (Frazier & Swiss, 2008; Walker & Brewer, 2008). If anything, the interests of individuals and organizations should be better linked (Argyris, 1964). Goal setting theory suggests that individuals are more likely to be motivated and achieve goals if they understand what is being expected of them (Locke & Latham, 2002). Studies show that setting specific, attainable goals will lead to higher performance and there is a linear relationship between goal difficulty and task performance. The GAO suggests one of the key practices for effective performance management is to align individual performance expectations with organizational goals (GAO, 2008). Thus, "goal alignment" helps ensure

employees direct their efforts toward organizational and management goals (Jauch, Osborn, & Terpening, 1980; Kristof-Brown & Stevens, 2001; Schiemann, 2009). The GAO's "clear line of sight" emphasizes the importance of linking individual activities with organizational outcomes. An agency must ultimately hold its employees accountable to achieve intended results, but those employees must know and agree to the standards and outcomes to which they are being held accountable (U.S. Office of Personnel Management [OPM], 2001).

Goal alignment's contribution to increasing organizational performance versus other performance appraisal attributes is twofold. First, it communicates to employees the importance of the organization's strategic goals. Goal alignment helps employees understand how their day-to-day activities support the strategic goals of the agency. Second, goal alignment ensures employee-level activities promote strategic goals, and indicators link to the desired outcomes of the strategic goals. For example, if an organization's goal is to "improve the quality of client service and increase client satisfaction," we would expect to see individual performance appraisal measures to include "soliciting client feedback" or "conducting X number of client care visits per quarter" or "achieving a client satisfaction score of X." Even without results-focused measures such as these, we would at least expect evaluation on some dimension of client service. Other components of a performance appraisal program, such as training or employee involvement, may contribute to the effectiveness of the appraisal program but not necessarily to the effectiveness of the organization.

For purposes of this research, goal alignment is defined as linking individual goal outcomes with organizational goal outcomes. Goal alignment can be operationalized in an organization in various ways (Ayers, 2013; Olian & Rynes, 1991; Schiemann, 2009). Goal alignment can occur through organizational processes, communication, structure, leadership, and management. The key is linking individuals' activities to organizational activities. Using the same operationalized from Ayers (2013), two ways to measure goal alignment in the performance appraisal program are (a) embedding of strategic plan goals into employee performance plans (plan alignment), and (b) employee knowledge of how his or her work relates to the agency's goals and priorities (employee alignment).

Plan alignment is where the individual employee performance appraisal plan components are designed to link to and support organizational goals. In the Federal Government, OPM suggests agencies align employee performance appraisal plans at the element level (e.g., a work assignment or responsibility, or a dimension or aspect of individual, team, or organizational performance, per definitions found in 5 CFR § 430.203). Performance management policy gives agencies flexibility to define the number and type of element in each employee performance; however, OPM suggests all critical elements be aligned to an agency strategic goal. Under the standardized Senior Executive Service (SES) Performance Management System, performance requirements under the "Results" element must be linked to an agency strategic goal. In practice, agencies generally have text embedded with the performance requirement or element to show the link to a specific organizational goal, such as "this is related to strategic goal 2.1." Not all agencies are equal in ensuring performance appraisal plans

provide for linkage to an organizational strategic plan goal. Agencies have been slow to adopt this best practice or make linkages to strategic plan goals meaningful for performance and accountability purposes. Goal setting theory has firmly established the impact between linking individuals' tasks with organizational goals for achieving increased performance (Locke & Latham, 2002). For example, goal specificity can lead to higher performance than standards that vaguely encourage employees to "just do your best." Employees can be motivated when they see that specific performance measures are linked to organizational outcomes. Moreover, when organizational goals are clearly defined, the goals can be cascaded to the individual level and attention focused on steps at the employee level to achieve the organizational goals (Pandey & Wright, 2006; Wright, 2004). OPM encourages agencies to evaluate organizational performance when they evaluate individual performance in an attempt to better tie individual and organizational performance accountability and outcomes. If agencies develop performance plans that tell employees how they will be evaluated based on how well they further the agencies' strategic goals, employee achievement of the goals will improve organizational performance.

Hypothesis 1: Alignment of strategic goals with employee performance plans will increase organizational performance.

Employee alignment is the extent to which individual employees know how their work relates to the agency's goals and priorities. This has been a standard measure of employee knowledge of agency goals and priorities in the federal agencies since 2002 (OPM, 2013). Awareness of organizational goals has been found to increase organizational commitment, especially where there is individual employee involvement in achieving the goals (Enriquez, McBride, & Paxton, 2001) and is positively associated with work attitudes, engagement, employee retention, and performance outcomes (Kristof-Brown & Stevens, 2001; Mone & London, 2009). Goal specificity or clarity can also affect work motivation (Wright, 2004). Beyond simply seeing in a performance appraisal plan where performance measures are related to organizational strategic goals, employee alignment is knowledge of how work is related to those goals. If employees know how their work relates to their agencies' goals, the assumption is employees will work to further the agencies' goals, which will improve organizational performance.

Hypothesis 2: Employee knowledge of agency strategic goals will increase organizational performance.

Factors to Quality Performance Appraisal Programs

If simple alignment of strategic plan goals with performance appraisal plans can increase organizational performance, could the capacity and quality of the overall performance appraisal program then strengthen or moderate the relationship between alignment and organizational performance? For example, good performance appraisal practices include employees being held accountable for achieving results in their performance appraisal

plans, having rewards for action and consequences for non-action (Kellough, 2006; Roberts, 1996), and employees being involved in or trained on how to write good performance measures that support organizational goals. If alignment with strategic plan goals can help to increase organizational performance, can the overall quality of the performance appraisal program positively modify that performance?

Quality performance appraisal programs are multifaceted with a number of success factors identified as contributing to a performance appraisal's effectiveness (Longenecker & Fink, 1997; Roberts, 1996; Roberts & Pavlak, 1996). The literature identifies several success factors for an effective performance appraisal program that range from providing feedback (Daley, 2001) to ensuring managers and employees are trained on the performance appraisal system (Boice & Kleiner, 1997). OPM recently identified several dimensions it considered necessary for developing a result-oriented performance culture in any organization: credible measures that demonstrate expected results, distinctions in levels of performance, consequences for action and non-action, employee involvement, feedback and dialogue, and training (OPM, 2008). These OPM dimensions are used for the purposes of this research to measure quality performance appraisal programs.

Credible measures. Effective performance appraisal plans provide valid, reliable, and controllable measures appropriate for the position (Lee, 1985; Marrelli, 2011; Murphy & Cleveland, 1995). A reliable measure produces consistent results whereas a controllable measure is one where the individual has substantial influence over the results. In addition, measures should provide for different desirable outcomes or results. Hall, Posner, and Harder (1989) suggested managers should establish explicit performance goals and measures during the performance appraisal process. Credible measures include achievable, measurable outputs or outcomes, such as "number of patients served" or "percent of satisfaction achieved." Using credible measures such as these increases goal congruence and allows organizations to focus on results (Rogers & Hunter, 1991). Federal regulations do not require credible measures, but instruct agencies to have at least one critical element and non-critical element to measure employee performance using pass/fail or other 3+ level scales (unsatisfactory, fully, exceeds fully, outstanding, etc.). Credible measures allow for the "line of sight" by actually measuring accomplishments aligned to a strategic plan's goals and objectives. Credible measures are conceptualized as the extent to which performance plans include appropriate measures, such as quality, quantity, timeliness, cost-effectiveness, indicators of competencies, and/or customer perspective (OPM, 2008).

Award expectancy. Expectancy theory argues that linking performance and awards is an important motivational step (Porter & Lawler, 1968). Employees should be able to see a link between their actions and activities and the results of their performance as it relates to awards. Moreover, awards should be linked to future behavior (Hall et al., 1989) and, with complex tasks, care should be taken to determine what motivates employees (Heinrich & Marschke, 2010). Longenecker and Fink (1997) said an effective performance appraisal program should link appraisal outcomes to performance ratings. Awards should be proportional to performance and organizational contributions. Award expectancy is

conceptualized as the extent to which employees perceive high-performing employees in their work unit are recognized or rewarded on a timely basis and that awards depend on how well employees perform their jobs.

Performance consequences. Just as award expectancy is expected to motivate employees, employees must also see there are consequences for non-performance and great performance alike. A substantial section of performance appraisal research has concentrated on rater biases and for good reason; the norm is to rate employees toward the top of the scale (Bretz, Milkovich, & Read, 1992; Jawahar & Williams, 1997). An effective performance appraisal program is able to differentiate between levels of performance. For this research, levels of performance demonstrate if results are being achieved and the degree to which those results are affecting performance. Performance Consequences is conceptualized as the extent to which the performance appraisal plan is used for recognizing top performers in a meaningful way and employees perceive their performance appraisal rating as a fair reflection of their performance.

Feedback. Research demonstrates a link between performance appraisal feedback and increased productivity and enhanced employee motivation (Daley, 2001; Kacmar, Witt, Zivnuska, & Gully, 2003; Roberts & Pavlak, 1996) and self-enhancement (Jordan & Audia, 2011). Frequent feedback is key, as well as ensuring the feedback is specific and comes from a trusted, reliable source. Frequent feedback allows for performance problems to remain small and employees to be more effective, less stressed, and more capable of achieving the intended results (Daley, 2001; Longenecker & Fink, 1997; Marrelli, 2011). Feedback is also useful for enhancing the performance appraisal skills of managers (Nemeroff & Cosentino, 1997). Through frequent feedback, employees are able to adjust their performance and ensure they remain on track to meet the standards established in their performance appraisal plans. Feedback is conceptualized as the extent to which the performance appraisal program establishes a performance feedback process that ensures a dialogue between supervisors, managers, and employees throughout the year.

Employee involvement. Employees are more committed and engaged when they are involved in decisions that affect their work (Marrelli, 2011). Employee involvement is valuable to the design of a performance appraisal program (Longenecker & Fink, 1997; Roberts, 2002) and to the development of performance standards in performance appraisal plans. Employee participation is linked with higher performance appraisal program satisfaction, fairness, acceptance, and trust (Roberts & Pavlak, 1996). If employees are involved in designing and developing performance standards, the more likely the employees have buy-in to achieving the strategic plan's goals and objectives. Employee Involvement is conceptualized as the extent to which employees are involved in the design of the performance appraisal program and in the development of their performance appraisal plans.

Training. Supervisors and employees cannot be expected to understand a performance appraisal program by just being given the forms and written procedures; both must be

educated on how the process works and their respective roles and responsibilities in the process (Boice & Kleiner, 1997; Longenecker & Fink, 1997). Like other management tools, supervisors and employees need to be trained on the program's proper use. Longenecker and Fink (1997) suggested training is imperative for managers to develop skills in "performance planning, participative goal-setting, coaching, providing writing effective performance reviews, effective interviewing skills, conflict resolution, and problem-solving" and for employees to develop skills in "developing realistic job descriptions, goal setting, monitoring personal performance, writing self-appraisals, and career planning and development" (p. 33). A common error in performance appraisal programs is failing to train the rater or ratee (Roberts & Pavlak, 1996). Training is also important for improving rater accuracy (Woehr & Huffcutt, 1994). Training is conceptualized as the extent to which the performance appraisal program requires that executives, managers, supervisors, and employees receive adequate training and retraining on the performance appraisal program.

The frequent appearance of similar performance appraisal program success factors suggests an index can be developed to evaluate the impact of overall performance appraisal program quality on goal alignment and organizational performance. A strong performance appraisal program with properly aligned performance plans can have a stronger impact on organizational performance because the program factors and accountability focus on goals that increase organizational performance. Moreover, the more employees understand how their work relates to the agency strategic goals and priorities, a strong performance appraisal program will focus employees' efforts and accountability on tasks that increase agency performance.

> **Hypothesis 3:** Alignment of strategic goals with employee performance plans will increase organizational performance more when the overall quality of the performance appraisal program is higher.
>
> **Hypothesis 4:** Employee knowledge of agency strategic goals will increase organizational performance more when the overall quality of the performance appraisal program is higher.

Data, Variables, and Method

This research focuses on the predictive relationship between goal alignment in performance appraisal programs and organizational performance (see Figure 1). The model uses data from two sources: OPM's Performance Appraisal Assessment Tool (PAAT) which evaluates 151 different federal agency performance appraisal programs and OMB's PART which evaluated 1,016 different agency program outcomes. The unit of analysis is a performance appraisal program.

Organizational Performance Dependent Variable

The dependent variable is PART "Program Results" ratings for federal programs, but only for programs also directly covered by a performance appraisal program evaluated
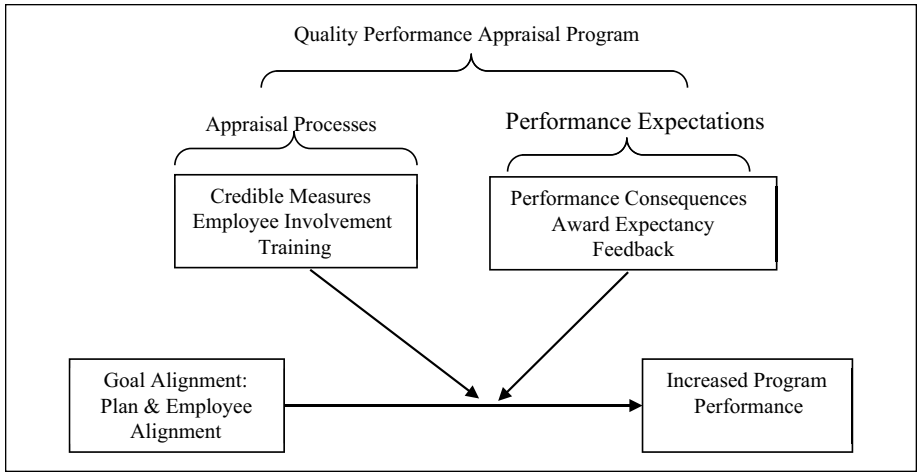
Figure 1. Model diagram.

by the PAAT. Since its introduction in FY 2004, OMB has used the tool to rate 1,016 federal programs (about 98% of all federal programs). The tool focused more on outcomes than outputs. PART asked approximately 25 questions about a program's performance and management. For each question, a short answer was followed by a detailed explanation with supporting evidence. The questions were divided into four categories: Program Purpose and Design (20%), Strategic Planning (10%), Program Management (20%), and Program Results (50%). OMB officials claimed that PART was designed to create "evidence-based dialogue" between OMB officials and agency staff (Moynihan, 2008). The mean for all "Program Results" ratings is right at 50% (scale range from 0% to 100%) while programs that also have a PAAT score have a mean of 59%. Where a performance appraisal program covers more than one PART program, the average rating for all the PART programs is used. PART ratings for this research come from the FY 2009 Budget, Spring Update, published by OMB on September 12, 2008. Because agencies worked with OMB program examiners to rate performance, OMB released specific instructions for completing the PART questions. "Program Results" rated program performance on goals reviewed in the strategic planning section and through other evaluations. The last guidance from OMB on PART was released in January 2008: "Program Assessment Rating Tool Guidance No. 2008-01." Ratings for each program's PART were published annually on ExpectMore.gov, now archived with the Bush Administration website (http://georgewbush-whitehouse.archives.gov/omb/expectmore/).

Goal Alignment Independent Variables

In 2006, OPM developed PAAT[1] to help agencies assess their performance appraisal programs' ability to be results-focused. The purpose of the tool is to help agencies

create a result-oriented performance culture. The tool rates programs across 10 different dimensions related to performance appraisal program capacity to support results-focused high-performance cultures. OPM Performance Management experts developed the tool based on best practices, empirical research, and experience working with Federal performance appraisal programs. Those same OPM experts review the agency programs and rate them using the PAAT rubric. Their ratings are used for this research. The PAAT is designed to evaluate a performance appraisal program, not a system.[2] The PAAT specifically measures if agencies have implemented OPM's suggested goal alignment. Moreover, it uses the results from the Federal Human Capital Survey (FHCS; see Note 1) Item 20: "I know how my work relates to the agency's goals and priorities" to validate goal alignment. Alignment is conceptualized in two ways (see Table 1): (a) the extent to which an employee performance appraisal plan aligns with and are designed to support organizational goals (plan alignment), and (b) the extent to which an individual employee understands how his or her work relates to the agency's goals and priorities (employee alignment).

Quality Performance Appraisal Independent Variables (Performance Expectations and Appraisal Processes)

Derived from a review of the literature, six variables are identified as leading to a quality performance appraisal program. The six variables come from the PAAT measures (see Table 1). Factor analysis was used to determine if the variables could create an index. The Kaiser–Meyer–Olkin Measure of Sampling Adequacy (0.71) indicated that the degree of common variance among the six variables was adequate for the factor analysis (Field, 2005). In addition, Bartlett's test was significant, meaning sphericity was not violated. Based on the factor loadings and eigenvalues, two factors emerged. Instead of one overarching factor, the variables loaded onto two different factors (using a factor loading threshold of 0.45; Hair, Tatham, Anderson, & Black, 1998; Stevens, 1992). The first factor explained 36.9% of the variance and the second factor explained 19% (see Table 2). These two factors were renamed, Factor 1: Performance Expectations (Award Expectancy, Performance Consequences, and Feedback), and Factor 2: Appraisal Processes (Credible Measures, Employee Involvement, and Training). The six measures used a mix of questions from the PAAT and the FHCS.

Sampling for this source of data is not random because the PAAT "sample" includes data from almost all performance appraisal programs from the major federal agencies (it excludes performance appraisal programs for employees in the SES). All 26 major federal agencies have had at least one part of their performance appraisal programs evaluated by the PAAT. In addition, 16 smaller agencies have had their programs evaluated by the PAAT. With data from all the major agencies and some smaller agencies, the data represent more than a cross-sampling of agency programs. The same non-random sampling issues apply to the PART data because the programs evaluated by PART must also be evaluated by the PAAT. However, because not all performance appraisal programs covered by the PAAT include PART programs, only performance appraisal programs that have associated programs rated by PART are used.

Table 1. Research Variables and Measures.

Variable question(s)	Question response	n	M	SD
Program performance				
PART "Program Results" ratings	% score	110	0.5886	0.18225
Plan alignment				
PAAT 6a. Does the program description require that employee performance plans align with organizational goals, such as the specific goals identified in the organization's annual performance plan?	Y/N	151	0.7285	0.44623
Employee alignment				
FHCS Item No. 19: I know how my work relates to the agency's goals and priorities.	% agreed	147	84.1776	5.55561
Results				
FHCS Item No. 32: I am held accountable for achieving results.	% agreed	146	80.6822	7.92392
Credible measures				
PAAT 8a. Does the appraisal program require that elements and standards (performance expectations) include credible measures of performance that are observable, measurable, and/or demonstrable?	Y/N	151	0.7086	0.45592
Award expectancy				
FHCS Item No. 28: Awards in my work unit depend on how well employees perform their jobs.	% agreed	146	49.0471	10.87925
Performance consequences (index of two questions)				
FHCS Item No. 29: In my work unit, differences in performance are recognized in a meaningful way.	% agreed	146	34.3060	10.39552
FHCS Item No. 30: My performance appraisal is a fair reflection of my performance.	% agreed	146	66.5817	8.91830
Feedback				
FHCS Item No. 31: Discussions with my supervisor/team leader about my performance are worthwhile.	% agreed	146	59.3422	7.08792
Employee involvement (index of three questions)				
PAAT 11a. Was the appraisal program designed with input from employees and their representatives, if applicable?	0-2 rating	151	1.2252	0.84200
PAAT 11b. Does the appraisal program require employee involvement in the development of the employee's performance plan?	0-2 rating	151	1.3709	0.79679
PAAT 11c. Are employees actually involved in the development of their performance plans?	0-4 rating	151	2.4768	1.33084

Table 1. (continued)

Variable question(s)	Question response	n	M	SD
Training (index of four questions)				
PAAT 13a. Does the appraisal program description require that supervisors receive training and retraining on the requirements and operation of the performance appraisal program?	Y/N	151	0.3642	0.48282
PAAT 13b. Has the agency conducted training for at least 50% of its supervisors on the performance appraisal program sometime during the last 2 years?	Y/N	151	0.4967	0.50165
PAAT 13c. Does the appraisal program description require that employees receive training and retraining on the requirements and operation of the performance appraisal program?	Y/N	151	0.3179	0.46720
PAAT 13d. Has the agency conducted training for at least 50% of employees on the performance appraisal program sometime during the last 2 years?	Y/N	151	0.3311	0.47218

Source. www.ExpectMore.gov
Note. Data are used from nine PAAT questions, six FHCS survey items, and PART "Program Results" scores. Question responses are Y/N = yes or no (dichotomous variable); percent positive responses to FHCS item question, on a 1% to 100% scale (continuous variable); percent rating on PART "Program Results" on a 0% to 100% scale. Number of PAAT Program with PART ratings, number of PART programs is much higher (1,016). Number is total number of performance appraisal programs (unit of analysis) where data for that question are available. PART = Program Assessment Rating Tool; PAAT = Performance Appraisal Assessment Tool; FHCS = Federal Human Capital Survey.

Table 2. Factor Loadings for Quality Performance Appraisal Variable (*N* = 108).

	Factor loadings	
	Performance expectations	Appraisal processes
Performance consequence	**.900**	.119
Award expectancy	**.873**	.043
Feedback	**.772**	.093
Training	−.016	**.685**
Employee involvement	.182	**.682**
Credible measures	.024	**.478**
% of variance	36.9	19.0

Note. Extraction method: Principal axis factoring. Rotation method: Promax with Kaiser Normalization. Bold factor loadings are the variables for each factor.

To aggregate the data from these separate sources, the program-level data were carefully cross-walked to ensure the program covered by the PAAT data (which includes FHCS data at the program level and verified by OPM) was indeed the same program covered by the PART data. Data cover the period of 2006 to 2008 to link PAAT evaluations to the PART evaluations, which occurred at different times for different programs. For example, the PART ratings for the U.S. Forest Service were linked to the PAAT data on the U.S. Forest Service. Where there was no clear one-to-one relationship, the data were removed. This reduces the overall sample size to 108 for testing the moderation model.

Results

A hierarchical regression analysis was used to test the predictive relationship of plan alignment and employee alignment and the moderating effect of the two factors on organizational performance. All variables were centered to reduce the multicollinearity among the main and interaction effects. Four interaction terms were created by multiplying the moderating variables (performance expectations and appraisal processes) with the predictive variables (plan alignment and employee alignment) to test the joint effects of these variables on the dependent variable (organizational performance).

The result of the model (see Tables 3 and 4) shows the first block accounts for 5% of the variance in the dependent variable and is significant ($p < .05$). The second block indicates the model remains significant, $F(5, 107) = 2.510$, $p < .05$, and explanatory increases to 17% of the variance in organizational performance (change in R^2 was significant, F change = 2.280, $p < .05$). Turning to the coefficient results, while the effect size is modest to small, a percent increase in employee knowledge of how their work relates to the agency's goals and priorities can lead to an increase in agency organizational performance. The plan alignment coefficient is very small and is not significantly related to organizational performance in the first or second block. In the second block, only the coefficient for the Employee Alignment_Performance Expectations interaction term is significant ($\beta = -.29$, $t = -2.665$, $p < .05$). The inclusion of the interaction terms appears to moderate the previous relationship between employee alignment and organizational performance. To decompose the interaction, the moderating variable was divided into three values (high, medium, and low) using the variable mean and one standard deviation above and below the mean. A simple slopes analysis[3] was used to determine the level at which the interaction was significant. Based on the results of the simple slope analysis, there is a significant interaction between employee alignment and organizational performance in agencies that have high and low levels of performance expectations (see Figure 2).

The hypotheses are partially supported by these results. Hypothesis 1 is not supported when goal alignment is measured as plan alignment. Several of the intervening factors that might explain this outcome are tested with the moderation model. Hypothesis 2 is supported. The first block indicates that increases in employees' knowledge of how their work relates to the agency's goals and priorities increase

Table 3. Model Correlations (N = 108).

Variable	Organizational Performance	Appraisal Plan Alignment	Employee Alignment	Performance Expectations	Appraisal Processes	Plan Alignment_ Expectations	Plan Alignment_ Processes	Employee Alignment_ Processes	Employee Alignment_ Expectations
Organizational Performance	I								
Appraisal Plan Alignment	.030	I							
Employee Alignment	.221*	.035	I						
Performance Expectations	.174	-.018	.369**	I					
Appraisal Processes	.010	.474**	.113	.127	I				
Plan Alignment_Expectations	-.260**	-.044	-.208**	-.011	-.100	I			
Plan Alignment_Processes	.054	-.107	-.062	-.153	-.156	.084	I		
Employee Alignment_Processes	.010	-.528**	-.093	-.042	-.126	.030	.069	I	
Employee Alignment_Expectations	-.250**	.018	-.045	-.109	-.038	.342**	.225**	.176*	I

*Correlation is significant at the .05 level (two-tailed). **Correlation is significant at the .01 level (two-tailed).

Table 4. Model Regression Results (*N* = 108).

Predictors	Block 1			Block 2		
	B	*SE*	β	*B*	*SE*	β
Plan Alignment	.025	.040	.059	.065	.051	.154
Employee Alignment	.008	.003	.224*	.003	.005	.076
Performance Expectations				.026	.023	.132
Appraisal Processes				−.021	.023	−.101
Plan Alignment_Processes				.008	.004	.178
Plan Alignment_Expectations				−.004	.003	−.139
Employee Alignment_Expectations				−.118	.044	−.290**
Employee Alignment_Processes				.096	.056	.190
R^2		.05*			.17*	
ΔR^2					*	

Note. Dependent variable is organizational performance. Adjusted R^2 is .03 and .10, respectively.
*Significant at the .05 level (two-tailed). **Significant at the .01 level (two-tailed).
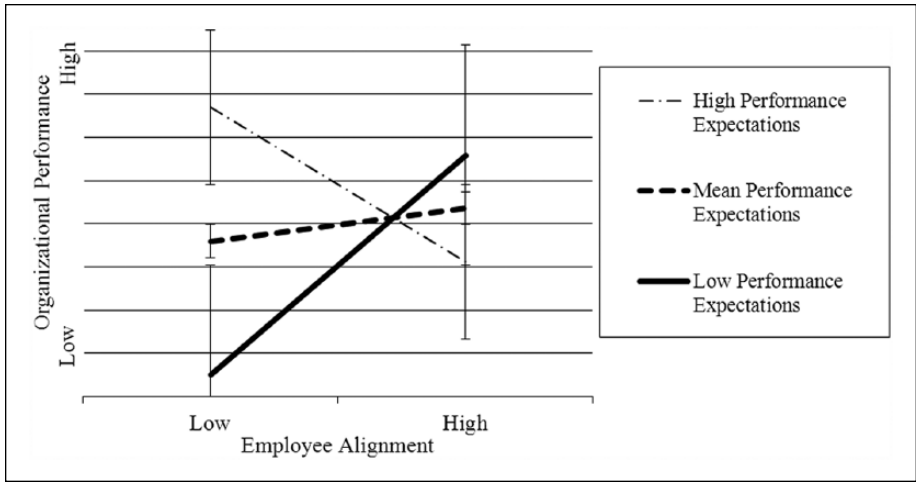
Figure 2. Simple slopes of employee alignment and performance expectations interaction effect.

organizational performance; however, the relationship is moderated in the more advanced analysis in the second block. The results for Hypotheses 3 and 4 are mixed. Foremost, plan alignment, appraisal processes, and the interaction terms are not predictive of or moderating to organizational performance (Hypothesis 3). Hypothesis 4 is partially supported. Employee alignment influences organizational performance depending on the level of performance expectations (high, medium, or low).

Discussion

The differences between the two conceptualizations of goal alignment challenge the conventional wisdom that goal alignment in the performance appraisal process is useful and contributes to organizational performance. It challenges the purpose of individual performance appraisals in organizations. In particular, the interaction among the variables illustrates within an organization's performance appraisal program the value of knowledge and awareness over the value of processes and procedures to increasing organizational performance. Based on these results, bureaucratic paper processes appear to have limited influence, whereas the human factor and human knowledge are more important to increasing organizational performance. The concept of goal alignment has focused on linking organizational processes with organizational goals through a performance management system, not necessarily through employee knowledge (although processes may lead to increased knowledge). Likewise, practitioners and reformers have favored structural fixes rather than human solutions when using management approaches to increase performance. Practitioners are reevaluating the structural approach to "fixing" performance management. The National Council on Federal Labor-Management Relations recommended a Performance Management Accountability Framework (PMAF) that offers more than a structural process fix and focuses on the human side of performance management, namely, the supervisors' abilities to provide substantive feedback to employees (National Council on Labor-Management Relations, 2012). Five federal agencies are piloting these ideas through the Goals–Engagement–Accountability–Results (GEAR) initiative, and time will tell whether the recommendations are successful. Nevertheless, embedding strategic plan goals in performance appraisal plans does have some value for increasing employee knowledge. In a simple comparison of the means and modes of plan alignment and employee alignment, programs with strategic plan goals embedded in performance appraisal plans generally have a slightly higher percent of employees agree that they know how their work relates to the agency's goals and priorities. The modal difference between the two groups is much higher.

The employee alignment and organizational performance relationship is moderated by high and low levels of performance expectations. As expected, under conditions of low-performance expectations in an agency, increases in employee alignment can increase organizational performance. This reinforces the value of employee knowledge to strategy implementation, at least for agencies that struggle with setting performance expectations, awarding good performance, and providing feedback to employees to allow them to adjust work performance. Employee alignment is effective at improving organizational performance when performance expectations is low, especially in circumstances where employees perceive they are not always held accountable for their performance. When employees understand how their work relates to the agency's goals, organizational performance can increase even if other performance management best practices are not in place. A practical outcome of this finding is that managers should spend more time communicating to employees how their work relates to the goals of the agency or ensuring work tasks and direction on assignments are tied to the goals of the agency.

The inverse relationship of high-performance expectations and employee alignment to organizational performance was neither expected nor supported in the literature and certainly adds greater complexity to a straightforward concept. This result may help unpack unintentional consequences of goal alignment. It could indicate that agencies that have good performance management practices and high employee knowledge still have issues with strategy content and development, or performance measurement and evaluation. Perfect alignment may exist and the agency may be results-oriented and encourage employees to achieve expectations, but the results they achieve are not aligned with true program performance and the outcomes they seek (or are sought by the performance examiners at OMB). Likewise, employee alignment and high-performance expectations may exist in agencies that have more ambiguous or hard to measure performance goals and the agencies are overcompensating in an effort to achieve (or not achieve) difficult outcomes. Although overcompensating with goal alignment, the agencies still cannot achieve organizational outcomes measured by PART. Perhaps, goal alignment works best in organizations where outcomes can be clearly articulated and activities leading to those outcomes are easier to define.

The overall low explanatory power of the model and the spotty performance of the coefficients suggest that performance appraisal program processes are not very effective in stimulating organizational performance. For practitioners and managers who have spent vast amounts of time devoted to improving these processes, this outcome is disconcerting. It raises concerns about the efficacy of the performance appraisal process in that the effort to incorporate and align goals, and hold employees accountable for them, may exceed the limits of human rationality. However, performance appraisal programs are one of many management tools for monitoring (Daft & Macintosh, 1984) and ensuring performance within an organization, and the process of linking performance appraisal plan standards to organizational strategic goals is one small function within the program. Obviously, the function's influence on organizational performance is limited. As Moynihan (2008) suggested, performance management is more likely to succeed in some conditions than in others. Future research should continue to test these outcomes.

This research contains several limitations that should be considered. First, this research only includes agency programs that were evaluated by PAAT and PART. PART did not evaluate administrative or support programs, so the influence of goal alignment and overall quality performance appraisal programs is not observed for administrative or support programs. In addition, the research does not evaluate SES performance appraisal programs where goal alignment is more likely to occur when executives are held accountable to agency program outcomes. Second, using two different data sets creates concerns of inter-rater reliability and interpreting causality. Assumptions are made regarding similar goals and measures appearing in performance appraisal programs, agency strategic plans, and PART organizational results measures. The PAAT ratings verified alignment between performance appraisal programs and agency strategic plan goals, but the PART ratings observe organizational performance measures that may not always be tied to an agency strategic plan. However, Jung and Lee (2013) were able to demonstrate a link between PART ratings and strategic planning capacity using two different data sets and Fernandez et al. (2010) linked FHCS results with PART ratings to evaluate public leadership. The

signification correlation between employee alignment and organizational performance increases confidence in these assumptions. A very practical lesson for federal agency managers is to ensure consistency of organizational goals and performance measures throughout all management functions. Third, with both the PART and PAAT ratings determined by federal officials, there is potential for bias in the data. As previously mentioned, the political nature of PART has led some to question the validity of the PART measures. Rater bias toward certain programs could skew actual program performance and its relationship to the goal alignment measures. However, programs used in the analysis have a slightly higher mean score (59%) than all PART'ed programs (50%). Fourth, the model, although significant, accounts for limited variance in the dependent variable. The low variance could be indicative of missing variables. The model would benefit from the inclusion of control variables, such as "leadership style" or "financial resources," that have previously been strongly linked to organizational performance (Boyne, 2003), but were not included to reduce use of additional data sources. Finally, this research is tailored to public-sector organizations and the results may not hold in the private sector.

Conclusion

Scholars have successfully demonstrated that a range of management factors can influence the performance of public organizations (Boyne, 2003; Boyne, Meier, O'Toole, & Walker, 2006; Brewer, 2005; Moynihan & Pandey, 2004), including goal alignment (Andrews et al., 2012; Locke & Latham, 2002). The results from this research offer a new perspective on goal alignment's ability to increase organizational performance when using public-sector performance appraisal programs. Although performance appraisal programs are a management tool for increasing organizational performance, they are not an entirely effective tool for driving organizational performance, especially when strategic plan goals are merely included in employee performance appraisal plans. The overall model explains some variance but not enough to be considered a strong management practice in its current form. Future research should challenge the results of this research and suggest new ways for goal alignment to link individual performance to organizational performance and empirically test that link. As PMAF suggests, a missing link might be the need for greater accountability. This implies that the problems may be human in nature and bound up in the culture of the agencies rather than in the program itself (National Council on Labor-Management Relations, 2012). Or the problem may be at a different management level. Agencies that work hard at improving employee performance in the human resources office and improving organizational performance in the performance and budget office could more effectively coordinate the two activities to better connect individual outcomes with organizational outcomes, thus creating the "clear line of sight" suggested by GAO. This coordination is important because although performance appraisal programs are a valuable tool for motivating, directing, and evaluating individual performance, the overall purpose of performance appraisals should be to improve organizational performance (DeNisi & Sonesh, 2010).

Declaration of Conflicting Interests

Funding

Notes

1. The Performance Appraisal Assessment Tool (PAAT) includes 73 qualitative and quantitative questions, including questions that request the program's Federal Human Capital Survey (FHCS) results. The FHCS is administered by U.S. Office of Personnel Management (OPM; 2006) to all full-time, permanent employees of the major agencies represented on the President's Management Council. The purpose of the FHCS (expanded in 2010 and renamed the Employee Viewpoint Survey) is to measure employees' perceptions of whether, and to what extent, conditions characterizing successful organizations are present in their agencies. In 2006, there were 73 survey items and participants responded to the items using the following scale: *strongly agree, agree, neither agree or disagree, disagree, strongly disagree, do not know*. OPM performed its own validity study of the FHCS items (2006). In responding to the PAAT, agency programs were asked to include FHCS results for key questions that covered the population under the performance appraisal program. This research utilizes nine questions from the PAAT and six questions from the FHCS reported in the PAAT.
2. Performance appraisal programs under an agency's performance appraisal system can cover multiple types of offices, programs, and divisions. For example, the Department of Treasury performance appraisal system has programs that cover whole bureaus, such as the Bureau of Public Debt, which has several PART'ed programs, as well as programs that cover offices such as the Inspector General or divisions such as the Departmental Administration. As these programs cover agency support functions, they do not have PART'ed programs. Performance appraisal programs that cover support functions cannot be used in the model. In addition, one performance appraisal program may cover one or more PART'ed programs, depending on the size and scope of the agency or division that it covers.
3. The simple slopes were calculated using a macro from Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. Journal of Educational and Behavioral Statistics, 31, 437-448.

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Author Biography

Rebecca S. Ayers, PhD, is the manager of the Performance Management Solutions in the reimbursable HR Solutions division of the U.S. Office of Personnel Management. The section provides consulting services to Federal Agencies to address individual and organizational performance matters necessary to properly create and sustain a healthy and effective result-oriented culture. She earned a doctorate in public administration from North Carolina State University. Her research interests include strategic planning, performance management, and organizational performance.