

# Factors Affecting the Productivity of Government Workers

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## Abstract

While there have been a variety of studies concerning government worker motivation and productivity, few, if any, studies have focused specifically on state government workers' perceptions about what factors affect their productivity. With more than 5 million workers employed by state governments in the United States, any improvement in state workplace productivity could have significant financial and service impact for society. In this study, state government workers identified those factors perceived as most affecting their workplace productivity. Data were collected through a survey offered to state government workers in the state of Wyoming. Factor analysis was used to derive key productivity factors from survey responses. The results indicate that state government workers appreciate having freedom and autonomy, like their jobs and the sense of achievement, and welcome teamwork, but feel limited by poor supervision and management, poor communications, and insufficient budgets and staffing. To improve productivity, the workers would eliminate bureaucracy, supervise better, and improve communication.

## Keywords

productivity, management, motivation, leadership, government, state government

## Overview

Workforce productivity remains a primary element for success in most organizations, including those in government. Knowing what factors influence productivity is a prerequisite to improving performance. Over the years, researchers have found that productivity is affected by relatively few influencers, and workers are generally aware of what those influencers are (Armstrong, 2006; Clawson & Newburg, 2005; Hankin, 2004; Newstrom & Bittel, 2002; Williams, 2003). Based on such insight, a study was implemented to directly identify those factors that most influence the productivity of the more than five million workers in state governments in the United States (State Government Employment Data, 2005). Identification of the specific productivity limiters operative in the government workplace will yield opportunities for significant productivity gains in public-sector organizations.

## Statement of the Problem

There is significant evidence that productivity advancement in government organizations has not kept pace with the increases found in the private sector (Killefer & Mendonca, 2006). Williams (2003) documented efforts to measure performance in the New York City government in the early 1900s. Political issues limited the success of most attempts to measure or improve productivity in the city. Attempts to

measure and control productivity in the federal government have not fared any better. Between 1987 and 1994, federal government productivity increased at one fourth the rate of the private sector (The Grail of Efficiency, 2005).

In 1993, the U.S. Federal Government passed the *Government Performance and Results Act* designed to require strategic plans and annual performance reports from all federal agencies. However, by 2008, the act and its requirements were mostly being ignored (Friel, 2008). Later, the Senate extended the *Government Performance and Results Act* to require gathering of data on key performance indicators. But, yet again, government agencies have not put the data collected to any productive use (Brodsky, 2010). Finally, in November 2011, "The federal labor-management council on Wednesday accepted recommendations to improve the government's performance management system, approving for agencies a roadmap that emphasizes better training for supervisors and more communication between employees and their bosses" (Lunney, 2011). Based on the results presented in this article, these most recent initiatives may have the potential for success.

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While there have been a variety of studies concerning government worker motivation (Kim, 2002; Lewis & Frank, 2002; Jurkiewicz & Massey, 1997; Wright, 2001) and productivity (The Grail of Efficiency, 2005; Mandel, 2003; Micheli, Mason, Kennerley, & Wilcox, 2005), few, if any, studies have focused specifically on state government workers' perceptions about what factors affect their productivity. With more than five million workers employed by state governments in the United States (State Government Employment Data, 2005), any improvement in state workplace productivity could have significant financial and service impact for society.

### Research Question

The opinions of state government employees were used to directly address the issue of workplace productivity. Understanding factors that influence worker productivity would help government managers adjust the workplace environment to increase opportunities for employee motivation and to potentially increase overall productivity. The following question guided the investigation:

*Research Question 1:* What, if any, factors are perceived by state government workers as most affecting their workplace productivity?

### Brief Review of Related Literature

Early researchers and writers discovered that a limited number of factors had the most impact on the productivity of workers. Taylor (1998) found that four key principles could be applied to dramatically improve workplace productivity. Taylor's principles advised managers to systematically design each job, scientifically select and train the workers, cooperate closely with the workers and divide the work and responsibility equally between the worker and management. Other studies focused on the premise that the quality of leadership directly affects productivity. Fleishman (1973) identified two primary dimensions of leadership behavior: "initiating structure" and "consideration" (p. 6). Initiating structure involves the extent to which the leader organizes and defines group relationships, establishes communication channels, and specifies methods for job accomplishment. Consideration involves the degree of mutual trust, respect, and warmth between the leaders and followers. Fleishman noted that consideration can be best described as "the tolerance of the leader for two-way communications with the followers" (p. 8). The work of these early researchers led to similar insights by more recent scholars and popular writers.

The leadership role in workplace productivity was further emphasized in the 1980s. In their best-selling book, *In Search of Excellence*, Peters and Waterman (1982) emphasized the role of leadership in guiding an organization toward success. The authors noted, "what we found was that associated with

almost every excellent company was a strong leader (or two) who seemed to have had a lot to do with making the company excellent in the first place" (p. 26). According to Peters (1987), to gain the greatest performance, employees should be closely involved in all aspects of the organization's operations. He said, "Involve everyone in everything" (p. 343). Echoing both Taylor and Peters, Creech (1994) advocated fully involving subordinates in organizational changes. He submitted that centralized control within an organization generally leads to failure and suboptimal performance. His mantra was "organize small to win big" (p. 283). More recently, Longenecker and Leffakis (2002) found that one overriding factor resulted in improved productivity in the modern workplace. That factor is revealed in the following statement. "White-collar productivity improvement requires effective leadership on a variety of fronts" (p. 34). Their conclusion is that leadership seems to be the single most influential factor affecting productivity in today's workplace.

The Society for Human Resource Management found that poor management was the primary cause of low productivity (St. Charles County Business Record, 2005). An *HR Focus* (HR Zeroes in on Productivity, 2005) study cited "streamlining procedures and improving communications" (p. 1) as central to productivity improvement. Pomeroy (2006) indicated that "inefficient planning of work and organizational structure by management" followed by "poor management leadership in demonstrating and leading change" (p. 1) are the two greatest obstacles to productivity in U.S. corporations.

From the past into the 2000s, the research into workplace productivity has resulted in consistent indicators. Koretz (1995) cited three key productivity factors: "inadequate supervision and employee involvement in decision-making, too much work, and insufficient rewards and chances to advance" (p. 1). Leonard (2000) noted surveys indicating that less organizational bureaucracy, a greater sense of purpose, clear goals, and being able to see results were essential to productivity.

From the continuous quality improvement movement, Juran made a concrete connection between quality improvement and productivity improvement: "Thus the improvement in quality results directly in an increase in productivity" (Gryna, Chua, & DeFeo, 2007, p. 18). Deming's approach to total quality management showed direct impacts on productivity enhancement as well. Among Deming's 14 points are key elements to improve productivity, including institute training and retraining, institute leadership, break down barriers between staff areas, and drive out fear (Walton, 1986). The point about fear received special emphasis by Deming. "The economic loss from fear is appalling" (Walton, 1986, p. 72). Deming described the effect of fear on worker performance. "Fear takes a horrible toll. Fear is all around, robbing people of their pride, hurting them, robbing them of a chance to contribute to the company" (p. 73). Ryan and Oestreich (1991) also described how fear impacts productivity noting that workers may begin to show the following traits: lack of

extra effort; making and hiding mistakes; missing deadlines and budgets; poor problem-solving and work methods as well as a loss of creativity, motivation, and risk taking.

Empirical evidence exists demonstrating the successful application of such principles. Byrnes (2006) highlighted Nucor Steel's system of performance-based compensation in which workers' pay is based on productivity measures. The result is a highly motivated workforce at Nucor. Although the news article portrayed the compensation/motivation plan at Nucor as unique and innovative, the steel maker's approach to pay-for-productivity was remarkably similar to that used by the Lincoln Electric Company since 1915. While such dramatic productivity initiatives are evident in the private sector and are often well publicized, the quest to find ways to improve productivity in government continues.

The dominant finding by government-focused researchers is that public-sector productivity has not kept pace with that of the private sector (de Lancer Julnes & Holzer, 2001; Mandel, 2003; Williams, 2003). Insights have been gained about the various dimensions of public-sector productivity and the value of productivity improvement to society (Cogburn & Schneider, 2003), yet effective improvement strategies have proven to be elusive. This study builds upon the solid foundation of established productivity theory and knowledge, and provides concrete support for logical and systematic actions to enhance government workplace productivity.

### Highlights of the Study Methodology

Data for this qualitative descriptive study were collected through a web-based survey to identify state government worker perceptions of what factors most strongly influence their productivity. The survey items for this analysis were general demographic categories and four open-ended questions requiring brief written responses. Descriptive statistics and factor analysis enabled positive identification of enhancements and limiters of workplace productivity. The four open-ended questions were as follows:

1. What situation, directive, policy, operating procedure, or other factor most limits your ability to perform the most productive work?
2. What bothers or irritates you most about your work area, your duties, the work environment, or your job in general?
3. What are the best aspects of your job or work responsibilities?
4. If you were in charge of everything, what changes would you make to improve the overall productivity, quality, and employee performance in state government?

Time and scope constraints limited administration of the survey to one state's employees: Wyoming. While that constraint could limit the potential generalization of the study to

the broader population of government workers, the research approach and factors identified provide a solid basis for a wider survey or additional localized surveys in other states and in other countries.

Web-based surveys are subject to potential limitations when respondents are not likely to possess computer access or Internet availability. However, those concerns were not relevant for the sample frame of Wyoming state workers selected for this study, who all had ready access to email and Internet communications. Rather, the web-based survey approach was predicted by Zikmund (2003) to become the dominant technique in the future. However, more recent events have put great emphasis on security issues associated with Internet access messages (Godbey, 2008; Hoffman, 2008). An unexpected limitation experienced in this study was the hesitancy of respondents to follow weblinks they received through unsolicited email messages.

A variation of the survey instrument was initially administered to a similar target population during an earlier study in the mid- to late 1990s. The survey items were well tested in the 1990s using several pretests and multiple applications to differing groups from the target population for a total of 332 respondents. Likewise, the survey was validated for internal validity and reliability through statistical comparisons of the multiple administrations of the survey. The multiple surveys yielded similar findings with results closely consistent with productivity theory and management practice (Haenisch, 1999).

The open-ended questions enabled the respondents to list factors most relevant to government workers. The items were evaluated by categorizing responses into factor groupings based on keyword identifiers. The keyword identifiers were selected from the content of the question responses. Experience with previous administrations of these questions indicated that the factor groupings would emerge rather quickly from the responses. Calculation of the percentage of responses applied to each identified factor enabled ranking of the factors in order of relative importance to the respondents.

The survey was offered to 980 Wyoming state government workers for whom email addresses were available. A total of 105 usable responses were received for a 10.7% response rate and a sample representing 1.4% of the 7,500 person state workforce. As noted by O'Neill and Palmer (2004) in their study of university students, the generalization of the results of such limited studies cannot be guaranteed. The applicability of this study's results to other states must be determined through further study involving a larger target population from among all the state governments. A larger scope was not logistically feasible for this study.

### Results

All valid responses were from Wyoming state government employees. Supervisors represented 49.5% of respondents with 50.5% nonsupervisors completing the survey. The

**Table 1.** Responses to “What Situation, Directive, Policy, Operating Procedure, or Other Factor Most Limits Your Ability to Perform the Most Productive Work?”

Factor	% of responses (n = 105)
Poor supervision and management	35.5
Poor communications	16.2
Low budget or insufficient staff	12.0
Poor pay or no recognition	10.0
Lack of training	8.1
Poor technology	7.1
Meetings and changes in plans	6.1
Too much work to do	5.0

**Table 2.** Responses to “What Bothers or Irritates You Most About Your Work Area, Your Duties, the Work Environment, or Your Job in General?”

Factor	% of responses (n = 105)
Poor supervision or management	23.2
Policies and politics	16.2
Ineffective or inconsiderate coworkers	15.3
Poor working conditions	14.6
Low pay and benefits	7.5
No respect or recognition	6.4
Poor communications	5.9
Incorrect workload, too high or too low	5.9
Technology problems	5.0

majority of respondents (68%) were from department or division-level positions with representation from all levels of government.

Female respondents accounted for 55% of the completed surveys. The mean job tenure was 5.9 years (71 months), while the median job tenure of respondents was 2.5 years (30 months). Job tenure ranged from 1 month to 28 years on the job. Nearly 47% of respondents had less than 2 years on the job. There was little difference in the mean job tenure between males (5.7 years) and females (6.1 years), but supervisors had significantly longer time on the job (7.8 years) than did non-supervisors (4.1 years). No significant differences in responses were found between or among demographic groupings.

Tables 1, 2, 3, and 4 list the factors derived from the survey responses. The percentage of responses referring to each factor is listed for each of the questions.

## Findings and Analysis

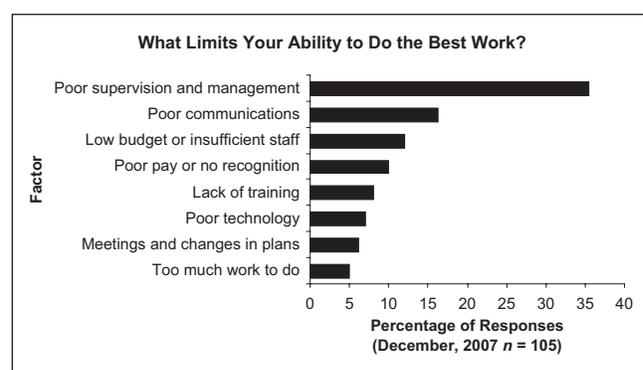
The research question asked, “What factors are perceived by state government workers as most affecting their workplace productivity?” In response to Survey Question 1,

**Table 3.** Responses to “What are the Best Aspects of Your Job or Work Responsibilities?”

Factor	% of responses (n = 105)
Autonomy and freedom	38.0
The job itself, sense of achievement	28.0
Working as part of a team	16.0
Opportunity for travel and work variety	9.0
Learning new skills	3.0
Work environment	3.0
Pay and benefits	3.0

**Table 4.** Responses to “If You Were in Charge of Everything, What Changes Would You Make to Improve the Overall Productivity, Quality, and Employee Performance in State Government?”

Factor	% of responses (n = 105)
Eliminate bureaucracy and red tape	20.9
Improve supervision and management	17.3
Communicate better	14.5
Reward and recognize performance more	13.6
Build teams	8.2
Increase pay	7.3
Provide training	7.2
Set goals and objective more clearly	5.5
Increase staff levels	5.5



**Figure 1.** Survey Question 1 responses sorted by ranking

“What limits your ability to do the best work?” (Table 1, Figure 1) the respondents identified poor supervision and management together with poor communications as the primary limiters of their productivity. The factors noted as bothers or irritants by the respondents (Table 2, Figure 2)

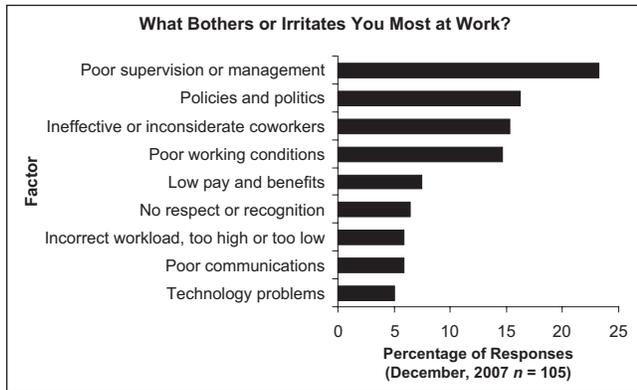


Figure 2. Survey Question 2 responses sorted by ranking

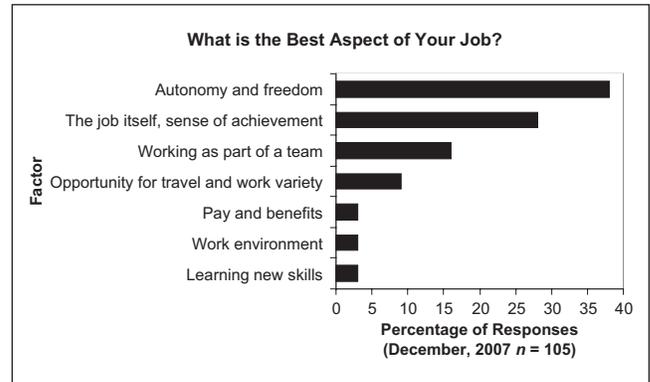


Figure 3. Survey Question 3 responses sorted by ranking

appear to be factors that limit their productivity as well. Poor supervision, policies and politics, ineffective or inconsiderate coworkers, and poor working conditions led the list of irritants. The implication is that state workers desire to be productive and obstacles to such success are irritating and frustrating. The state workers also seem to be seeking improved leadership from their supervisors and managers. Stronger supervision—in the form of direction and planning rather than micromanagement—and improved communications are desired by these state government respondents. Surprisingly, low budgets and insufficient staff was the third most mentioned limiter of work ability.

However, the workers expressed strong appreciation for positive aspects of their jobs, including the autonomy and freedom, the job itself, a sense of achievement, and being able to work as part of a team (Table 3, Figure 3). To improve productivity in the state government workplace, the respondents suggested elimination of bureaucracy and red tape, improved supervision and management, better communication, and more rewards and recognition for performance (Table 4, Figure 4). The factors identified in this study correspond to findings in a variety of research over the years.

The favorable factors correlate with the higher order needs of Maslow’s hierarchy and Herzberg’s satisfiers in his two-factor theory of motivation (Bounds, Dobbins, & Fowler, 1995; Griffin, 2002). In fact, Fournies (1978) wrote a practical guide for improving workplace productivity by attending exclusively to higher order needs and satisfiers such as recognition, a sense of achievement, and the job itself. These are precisely the factors identified by the survey respondents as the best aspects of their jobs.

The limiting factors relate closely to Herzberg’s hygiene factors (supervision, interpersonal relationships, organizational policies, compensation, and working conditions) as well as to the two key elements of leadership as defined by Fleishman (1973): “initiation of structure” and “tolerance by the leader for two-way communication with the followers”

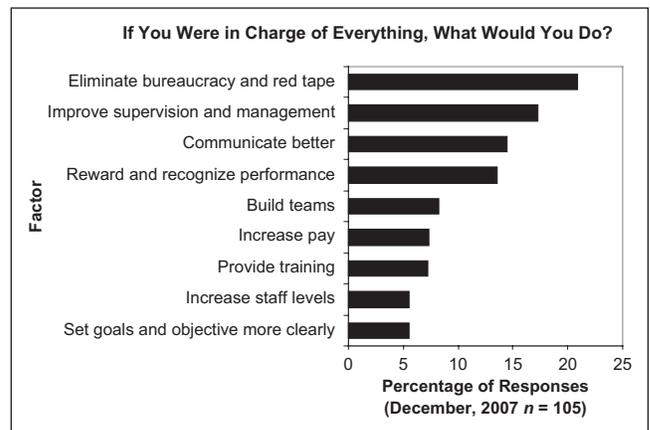


Figure 4. Survey Question 4 responses sorted by ranking

(p. 8). The issues of poor supervision, poor management, poor communication, and low levels of recognition relate to the broader concept of leadership that receives such emphasis in the literature.

### Summary

This study was designed to determine what factors most influence the productivity of state government workers in the United States. The research question asked, “What, if any, factors are perceived by state government workers as most affecting their workplace productivity?” The most frequently noted factors limiting productivity were poor supervision and management, poor communications, low budget or insufficient staff, and poor pay or no recognition. Respondents also identified favorable workplace factors, including autonomy and freedom, the job itself and a sense of achievement, and working as part of a team. Were the workers in charge, they would eliminate bureaucracy and red tape, improve supervision and management, communicate better, and reward and recognize performance more often to improve productivity.

## Conclusions

It appears that, just as private-sector employees, workers in state government respond productively to effective supervision, open communications, elimination of bureaucracy, a sense of achievement on the job, teamwork, and rewards and recognition. Management attention to these identified areas will likely lead to improvements in overall productivity in the state work setting. The broad concept of effective leadership retains its prominence as the primary factor influencing productivity.

This study's results can be used to validate that there are few, if any, differences in the most critical factors affecting productivity in either the private sector or the public sector. Attention to the productivity factors identified by this study and by others will enable managers to better adjust working conditions to enhance overall productivity in the state government workplace. The key factors are active and effective leadership, effective two-way communications, setting of clear goals and objectives, elimination of bureaucracy, creation of teamwork, and positive motivation through frequent recognition of employee achievement.

## Recommendations

The congruence of this study's results with previous research in the private sector indicates the potential for general applicability of the findings across organizations. The key factor appears to be effective leadership by supervisors and managers. The indications are that large service-oriented organizations will likely benefit from increased attention to setting of clear goals, institution of effective leadership, establishing training programs, improving supervision and management skills, building teamwork, and recognizing and rewarding employee performance. Organizations are well advised to attend to development of effective supervisors through both formal and on-the-job training. Enhancement of front-line supervisory effectiveness can be a critical first initiative toward productivity improvement in any organization. These results clearly support Human Resource Management initiatives to continue emphasis on training in leadership and supervision skills for both new and existing managers and supervisors.

Follow-on studies focusing on other state governments would be useful to determine whether the results of this study are unique to the Wyoming workforce. More complete verification that productivity factors in the state government environment correspond to those in the private sector will require additional studies. A study targeting several states or another individual state would help generalize the findings in this area of research. Of course, similar studies in other countries would yield useful insight into the generalization potential of these results across cultures.

## Declaration of Conflicting Interests

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