

**The Importance of Cultivating Management Habits:**

**Reducing Bad Habits, Promoting Good Habits.**

by

Professor Jonathan P. West  
University of Miami  
Department of Political Science  
314 Jenkins Building  
Coral Gables, FL, 33124  
(305) 284-2500  
[jwest@miami.edu](mailto:jwest@miami.edu)

and

Professor Evan M. Berman  
Public Administration Institute  
Louisiana State University  
Baton Rouge, LA 70803  
[berman@lsu.edu](mailto:berman@lsu.edu)

May 2006

Paper presented at the conference “A Performing Public Sector: The Second Trans-Atlantic Dialogue,” in Leuven (Belgium), 1-3 June 2006. Do not quote without written permission from the authors.

## **The Importance of Cultivating Management Habits: Reducing Bad Habits, Promoting Good Habits.**

### **ABSTRACT**

Managers' work habits—both good and bad—contribute significantly to individual and organizational productivity. Based on a national survey of senior managers in city governments with populations over 50,000, this study finds that good management habits are significantly associated with higher performance. Yet, bad managerial work habits are also significantly present, too, and these (i) can offset performance gains from good management habits and (ii) are a highly significant barrier to cultivating good management habits. Bad management habits are significantly present in about 45% of cities, and most commonly involve managers being overly passive, judgmental, defensive, intimidating, closed-minded or tardy in their performance. Hands-on strategies of working with individual managers are effective in identifying, addressing and overcoming bad habits. However, these efforts often only identify and reward positive habits. This article concludes that an effort to improve organizational performance involves identifying and reducing bad management habits.

## **The Importance of Cultivating Management Habits:**

### **Reducing Bad Habits, Promoting Good Habits.**

Managers' work habits—both good and bad—contribute significantly to individual and organizational productivity. Managerial habits such as being pro-active, goal-oriented, courteous, and synergistic contribute to high performance (Waldroop and Butler, 2000a, 2000b; Covey, 1990; Keelin and Arnold, 2002; Neiman and Thompson, 2004). However, it is readily, albeit anecdotally observed that neither high performance nor these management habits are commonplace (Berman and West, 2003; Light, 1999, 2005; Nutt, 2002, 2004; West and Berman, 1997). British Prime Minister Tony Blair has observed regarding those working in the public sector, that they are often "...rooted in the concept that if it's always been done this way, it must always be done this way." (cited in Brookfield, 2000: 13). Informal rules and habit-based practices help to explain why this may be the case in many jurisdictions. Habits are defined as non-reflective mindsets and behaviors that are repetitive, stable and in resistant to change. This article examines bad management habits as critical barriers for developing positive habits and improving organizational performance. Examples of bad managerial habits are being arrogant, defensive, closed-minded, judgmental, and intimidating, and stubborn. These bad habits can impede performance and the development of positive habits. Such habits among managers are especially important as they may negatively affect the leadership of organizations (Finkelstein, 2004; Lubit, 2004; Cohen and Eimicke, 2002; Ashworth, 2001). The bad habits of managers require careful management.

Specifically, this study examines the following questions: What is the prevalence of good and bad habits among senior municipal managers? How do good habits affect bad habits, and vice versa? How do these habits affect organizational performance? Which habits are most prevalent? What strategies do top managers use to cultivate good habits, and which do they use to reduce bad habits? How effective are these strategies? Which strategies are best used in tandem with others? This article is based on an in-depth mail survey among chief administrative officers in cities with populations over 50,000, as well as in-depth interviews among a sample of respondents. This combination of quantitative and qualitative methods enriches understanding of workplace habits and strategies to address them.

Systematic analysis of managerial workplace habits and their link to organizational performance is lacking. There is a wealth of practitioner literature in business management, largely non-empirical commentaries, identifying the critical habits in the following respective fields: information technology (Datz, 2003), safety administration (Kincaid, 1996), manufacturing (Pollock, 1997), management (Haddock, 1997; Barrier, 1999; Finkelstein, 2004), negotiations (Sebenius, 2001), financial services (Leeds, 1996; Van Zijl, 1999), insurance (Groner, 1997), and human resources (Rosner, 1999). While some of the observations regarding habit management mentioned in these

writings would apply as well in public management as they do in business (e.g., managing time, accepting criticism, encouraging and reward full participation, ), there is sparse literature about the specific challenges confronting senior local public administrators and the habits that either serve them well or poorly. Some practitioner-oriented articles exist on developing effective habits of elected city councils (Neu 1997, Vogelsang-Coombs 1997), and on habits of public managers in the United Kingdom (Brookfield, 2000), but none deal with senior managers in U.S. local governments. Some articles identify the habits of exceptionally dysfunctional managers, such as those who are abusive, grandiose, controlling or antisocial (Finkelstein, 2004; Lubit, 2004; Waldroop and Butler, 2000a).<sup>1</sup> However, few empirical articles focus in depth on ways to manage the bad habits of public managers. This paper seeks to address this gap in the literature.

This study has limitations. Our study examines the opinions of top managers in cities about the habits of managers reporting to them. While top managers are in a good position to assess the habits of those with whom they regularly deal, other stakeholders may have different perceptions about these habits, such as their employees. Also, the possibility of some respondent bias and faulty observation cannot be ruled out. However, procedures are used such as follow-up interviews and triangulation to enhance the validity of the findings (discussed further below).

### **Framework**

Habits are generally described as non-reflective, repetitive, and stable patterns of behaviors and attitudes that persist and often resist change (Wittenbraker et al., 1983 and Kahle and Beatty 1987, Covey, 1990). Habits are characteristic mindsets and ways of doing things. As McDonald (1998) notes, much of our work life is spent in a “habit zone.” Many authors focus on the attitude-behaviors relationship (Beatty and Kahle, 1988; Kahle, 1984; Kahle et. al, 1980). Behavioral habits are usually accompanied by persistent and stable “mind patterns” that provide justifications for behaviors, and some authors study customary and persistent ways of thinking or perceiving which give rise to characteristic behaviors. People vary in consciousness of their own mind patterns and behaviors, and also in their reflection about their habits of which they are aware (Urch Druskat and Wolff, 2001).<sup>2</sup>

Habits can have positive or negative consequences. For example, when we see someone, we may instinctively say “how are you?,” without being much aware of why we are saying that, or even to whom we are saying it. Yet, doing so allows for social interaction and can help provide for the necessary social linkages that are useful when subsequent collaborative work needs to be done; these are positive consequences of this habit. Habits are also positive in that they are a relatively efficient way of dealing with work and other aspects of life. By devoting relatively little attention to most of our habits, people are able to focus their efforts on other matters or situations that require some immediate or changed response. That is, until a habit is seen as problematic or deficient in some way. In that case, it needs reflection, analysis and modification.

Habits can have positive or negative consequences, but they are never solely so. In the above example, saying “how are you?” to the wrong person, at the wrong time, at the circumstances can have negative consequences. Smoking is statistically associated

with numerous illnesses, but in the moment it also reduces stress, which is positive. The terms “positive” and “negative” as regarding habits are thus applied with regard to the balance of consequences; even if saying “how are you?” sometimes has negative consequences, it is still regarded as, on balance, a “positive” social habit, and smoking is, of course, generally regarded as decided negative habit.

Among the many factors identified with the success of high performing organizations is their ability to get managers to adopt new roles and expectations. The new roles and expectations eventually become behavior and mindset habits for managers and employees, which then allows them to focus on new challenges. The literature identifies numerous new norms with regard to work productivity (Holzer and Lee, 2004; Berman, 2006), collaboration (Goldsmith and Eggers, 2004; Denhardt, Denhardt and Aristigueta, 2001; Yang and Mossholder, 2004), ethics (Pritchard, 2006; Lewis and Gilman, 2005; Sullivan and Martin, 2001) and self-management (Covey and Pofeldt, 2000; Kraus, 2002; Waldroop and Butler, 2000b); Managerial work habits are readily identified that promote these norms. For example, the managerial thinking habit of being pro-active affects what work gets done and often how it gets done as well. Similarly, habits of effective communication, listening and attentiveness promote working with others. Ethical work habits involve raising question of normative nature and dealing with them in effective ways. We label these habits as ‘positive,’ because they support the goals of performance (see Table 2).

Bad habits can become the Achilles’ heels of organizations (Waldroop and Butler, 2000b). Bad habits stand apart; they are not the absence of good habits. Bad management work habits can take many forms, including routine underestimation of problems, stubbornly relying on what worked in the past, or focusing unduly on urgent tasks with short-term consequences to the neglect of more important longer-range matters. Bad management habits cause managers to make many poor judgments which. For example, poor management habits may also include a pattern of rushed decisions without due deliberation or continuing refusal to provide performance-related feedback. Other examples of bad management habits include being late, not performing work on time, being rude to others, or not keeping promises.

The standard for evaluating bad habits from the perspective of organizational effectiveness is different from that of good habits. As the saying goes, one rotten apple spoils the bunch. It takes only a few managers with a few bad habits to sharply reduce their departments or team’s performance (e.g., by lowering standards and expectations for all). The presence of a bad habits among managers is of significant concern. By contrast, high organizational performance requires that many managers have a broad range of positive habits. They may vary in their positive habits, but they need have enough to deal with the various technical, human, networking and leadership aspects of the managerial job.

What can managers and their organizations do to promote good habits and reduce bad habits? The process of habit change is well-established in the psychological literature (Lewin 1947), and involves four steps, uncovering, redefining, learning, and relearning to produce change in work habits (e.g., Vogelsang-Coombs, 1997). This first step involves an assessment, or realization made by a manager that their bad habit is problematic. Arriving at this realization may require several interactions with superiors, one of which may include a performance appraisal. Berman (2006) uses the phrase “rule of three” to

suggest that people often need to hear information several times before they take it seriously. The purpose of this first step is to provide the motivation for change. The second step involves reframing the habit as not being in-line with the requirements of performance. This occurs once the norm has been stated and examples of positive and acceptable behaviors are provided. The third step involves putting into practice the desired behavior, and arresting the old habit. This is a learning period in which feedback is crucial, both to support the new behavior and to maintain motivation towards change. This period will have many initial 'false starts.' The fourth phase involves full arrest of the old behavior and consolidation of the new behavior which, through repetition, can then become a new management habit. These four steps are similar to the more comprehensive learning program initiated at General Electric by Jack Welch who was concerned about bad habits in the company.<sup>3</sup>

The change process is furthered when supported by organizational policies. For example, organizations can include habits as a criterion in their performance appraisals of managers. They can reward managers for good habits and punish others for bad habits, and include work habits as a criterion in promotion decisions. Organizations can also institute training programs that stress good work habits as well as identify and correct those that are "bad." Formalizing mentor programs and supporting on-the-job coaching can help managers to identify habit-based work practices that are positive or problematic. This can lead to tailored feedback, realistic goal setting, and appropriate action steps for improved performance. The literature on leadership, productivity, organizational change, learning theory, and staff development suggests additional strategies that have been used successfully (Buckingham and Coffman 1999; Guy 2004; Olshfski and Levine 2004; Shafritz, et al., 2004; Van Wart 2004, 2005).

The empirical question is: To what extent do top managers and their organizations identify and address bad habits among their managers, and in what way do they support managers to change their bad habits? Change initiatives are obviously quite time consuming and require a degree of openness and communication that might only be found in high performing organizations. However, it is unlikely that organizations can perform well without addressing managerial bad habits, and in most instances one would expect that such habits characterize just a few senior managers. Thus, the burden might not be that large as only few managers would be subject to habit-management intervention strategies. Finally, this study also examines the impact of habits, positive and negative, on organizational performance and the efforts to reinforce or change these habits. For example, it examines the impact of bad habits on perceptions of developing innovative program and on using information technology. It also examines the impact of management habits on such matters as collaboration with community leaders and perceptions of citizen trust. Both are clearly affected by managers' interactions and by their performance.

## **Methods**

During Fall 2005 and Spring 2006, a mail survey of city managers and chief administrative officers (CAOs) was undertaken in all 653 U.S. cities with populations over 50,000 (ICMA 2005), which was followed-up by in-depth, telephone interviews

with selected respondents in Spring 2006. The extensive mail survey, which has over 275 items, involved a pilot survey and three rounds of mailings that resulted in a final sample of 212 completed responses. The response rate was 32.5% and is a bit below the response rates of 30-45% that were reported elsewhere. (e.g., Hays and Kearney, 2001; Berman and Korosec, 2005). Among respondents, 55.5% of surveys were completed by the addressee (City Manager or Chief Administrative Officer, as appropriate), and, of the remainder, about half were completed by an assistant city manager. Almost all of the remaining was completed by respondents with such titles as city clerk, director of human resources, director of administrative services, or chief of staff. The respondent sample is referred to as “senior managers,” reflecting this diversity of positions. On average, respondents indicated that they have worked 22.5 years in government, and have spent 11.7 years within their present jurisdiction. 89.7% of respondents stated that they were very familiar or familiar with the performance of managers in their jurisdiction. This sample consisted of senior, informed leaders.

Among the respondents, 53.8% reported that their highest degree was in public administration, the remainder reported business administration, political science, law, engineering, urban planning and other fields. Of the respondents, 70.1% of respondents have an MA degree, and 69.3% are male. 19.6% are younger than 45 years old, 37.8% are between the ages of 45 and 54, and 42.6% are older than 54. The sample is broadly representative of the population.<sup>4</sup> In the sample, 69.7% of respondents are from cities with populations between 50,000 and 99,999, 19.0% of the respondents are from cities between 100,000 and 249,999, and the remainder, 10.9% are from cities with populations of 250,000 and more. Of the population of cities, 62.2% had populations between 50,000 and 99,999, 27.4% had population between 100,000 and 249,999, and 10.4% had populations of 250,000 and more. In the sample, 75.4% of these respondents are in cities that have a city-manager form of government, compared to 62.5% of cities in the population. In the subsequent analysis, we examine the impact of such minor differences in size and form of government, but conclude that these do not materially affect study findings.

The survey design also addresses measurement validity as follows. First, the survey assesses behaviors and communications of managers that directly report to respondents. Such respondents are likely to be well informed regarding the behaviors and communications of these direct subordinates as a function of respondents' responsibilities. Second, the survey items address empirically observable phenomena such as behaviors and communications, rather than mindsets of subordinates which cannot be directly or even accurately observed. Third, the survey avoids, for the most part, using the term ‘habit’ when asking about behaviors and communications in which they are regularly engaged. This is to avoid any possible misunderstanding of the term ‘habit,’ which, for some, may also have judgmental connotations. As a result, we also avoid asking respondents about their own habits because self-reporting can be biased when considering their own bad habits.

The possibility of sample bias is examined by comparing the responses of addressees (city managers and CAOs) with those of other respondents. Further, we compared the responses of those working more versus fewer years in their present jurisdictions. While a few such differences exist, they are relatively minor and do not significantly affect our results reported here. We also assessed whether relevant personal

orientations might be associated with different perceptions of habits, but find no such relationships. For example, respondents who express a strong work ethic for themselves (e.g., “I like a busy schedule” or “I feel guilty when I take a break from work”) are not associated with perceptions of bad habits among managers reporting to them (both  $p > .05$ ). We are currently in the process of conducting in-depth interviews among respondents, including those who indicate very high or low prevalence of bad habits. This helps to validate mail survey responses. We will also conduct a non-respondents survey, to assess any differences between respondents and non-respondents, and will examine differences between early and late responders.

## Results

### *Management Habits*

Table 1 shows perceptions of bad management habits. The most common are being overly judgmental of the shortcomings of others (39.1% of respondents who strongly agree, agree or somewhat agree that at least one manager reporting to the respondent has this habit), overly aggressive and intimidating to others (33.3%), being passive and unwilling to take needed actions (33.3%), and being defensive and unable to take criticism (27.6%). Other bad habits include not being able to complete work on time (21.8%), being distrustful of the motives of team members (22.7%) and claiming credit for the accomplishments of others (21.3%). The items shown in Table 1 are grouped into four categories that include the following: habits that reflect work passivity, concern problems of self-management, as well as those that impede collaboration, and hamper acceptance of new ideas and decision-making. Somewhat fewer respondents report problems of self-management. This might be expected from this group as some do report inconsistent performance on different days (15.5%) and managers being unable to control their temper (10.9%).<sup>5</sup>

[ Insert Table 1 About Here ]

The above findings suggest that many senior managers are confronted by one or more of these problems when dealing with their subordinate managers. The prevalence of any specific bad habit is not very high (especially among those who agree or strongly agree), however, many managers do experience one or more of these. Figure 1 shows the prevalence of bad habits. Among respondents, 15.7% of respondents agree or strongly agree that three or more bad habits are present (such jurisdictions are labeled “extreme”), 27.7% of respondents agree or strongly agree that one or two bad habits are present, or ‘somewhat’ agree that five or more bad habits are present (labeled “present”), and 17.4% of respondents somewhat agree that two, three or four bad habits are present (labeled “somewhat present”). While the cut-off points of these categories are somewhat debatable and subject to what-if analysis, that fact is that about two-thirds of respondents at least somewhat agree that two or more habits are present.<sup>6</sup> The same items that were mentioned earlier as being most prevalent are also most prevalent among cities labeled as “extreme” or “present” regarding bad managerial habits.

[ Insert Figure 1 About Here ]

Various interviewees gave examples of bad management habits. One example:

“[In] a recent case, a supervisor had a fight with an employee. It was an ugly situation and cops had to get involved. The supervisor was defensive and saw it as his personality to be so when doing evaluations. I had to get involved in the case because both employees appealed their disciplinary actions. I had to tell the supervisor some workers can handle him getting defensive, but others can’t.”

The presence of bad management habits does not vary significantly by city size, region or form of government. However, using the above classification, we find that cities with populations between 100,000 and 249,999 have a somewhat lower prevalence of bad management habits, according to respondents. For example, in such cities 54.8% are classified as not having bad management habits, compared with 34.7% of those with populations less than 100,000, and 21.1% of those with populations over 250,000. Perceptions of bad management habits are not associated with respondents’ age, gender or highest attained degree, nor are they associated with whether the survey was completed by the addressee or someone else.

Table 2 shows the prevalence of positive (or, good) habits. Among respondents, 88.6% agree or strongly agree that managers and supervisors who report directly to them regularly demonstrate civility, courtesy and decency.<sup>7</sup> Respondents also agree or strongly agree that they take a stand where issues of ethics are at stake (86.9%), safeguard confidential information (86.9%), show concern for the personal well being of team members (85.7%), refuse to comply with unethical requests (82.9%), consider the rights of others in making decisions (80.0%), and set high standards for themselves (77.0%). Clearly, most senior managers note many positive habits in their subordinate managers and supervisors.<sup>8</sup> Perhaps it is not so surprising that that many respondents have favorable assessments, as these habits are de facto requirements of many managers’ jobs.

[ Insert Table 2 About Here ]

Table 2 also shows that bad habits are negatively associated with good habits. Each of the good habits is statistically negatively associated with the index of bad habits. It is important to note that good habits are worded quite differently from bad habits; they are different. In a separate analysis, the following bad habits are found to be most strongly associated with the index of good habits:<sup>9</sup> managers do not recognize the impact of their feelings on their actions ( $\tau\text{-}c = -.408$ ,  $p < .01$ ), managers are closed to new ways of doing things ( $\tau\text{-}c = -.454$ ,  $p < .01$ ), and managers are willing to blame their failures on others ( $\tau\text{-}c = -.416$ ,  $p < .01$ ).<sup>10</sup> These are indeed not part of concepts contained in Table 2. The strongly negative association supports the notion that good habits and bad habits crowd each other out; the presence of bad habits is a barrier to developing good habits, and the presence of good habits presupposes the absence or very limited efficacy of bad habits. The matter of causality is taken up in the next section. Perceptions of good habits do not vary significantly by city size, region or form of government, nor do they vary by whether the survey was completed by the addressee, or the gender, age or the highest attained degree of respondents.

### *Habit Management Strategies and Outcomes*

Table 3 shows that managers commonly point out changes that need to be made by their subordinate managers (89.2%), and often challenge managers to change their work habits (76.4%). About two-thirds of managers also call attention to negative work habits (65.9%), gather evidence to support the needed change (60.8%), openly discuss with managers the importance of good work habits (60.8%), set explicit goals for new work habits managers need to achieve (56.3%), include work habits as a criterion in performance appraisal (61.9%) and build good work habits into the organizational culture (59.7%). Slightly more than half of respondents also stress the following: not changing some habits is unacceptable (59.2%), they celebrate the success of changed work habits (53.9%), and they share stories of success and difficulties in changing work habits (55.7%). Table 3 shows that a broad range of appropriate change-oriented strategies are used.

[ Insert Table 3 About here ]

The high frequency of these tactics stands out and is consistent with the above finding that about two-thirds of cities experience bad managerial habits to some extent. The high frequency and broad range of tactics further supports the contention that changing bad habits is indeed difficult, and managers that do so will need both persistence and the use of many tactics to bring change about. On average, cities use 14.5 of these 31 strategies.

Table 3 also groups these strategies into four categories: strategies for identifying problematic habits, for identifying solutions for overcoming bad habits (including suggesting other habits that might be adopted), management strategies for reducing bad habits and promoting good habits, and policies that further that reduce bad habits and promote good habits. The alpha measures for these index variables are shown in Table 3. Interestingly, only problematic habit identification is directly associated with the reduction in bad managerial habits ( $\tau\text{-}c = -.185, p < .01$ ); the other three categories are associated with problem identification (each at  $p < .001$ ) and, hence, indirectly associated with the reduction of bad habits. By examining the items of these categories, these findings suggest that bad habit reduction requires substantial hands-on work with those who have the bad habits. It is not enough to ‘merely’ identify good habits and to coax managers to adopt better habits.

The need for hands-on confronting of bad habits is mentioned by this city manager from a California city:

“I think the first thing is feedback, and as soon as possible. Let the manager know right away, and it has to be consistent with follow-ups. For example, we had a supervisor of a water treatment plant that was a 24 hour operation. He kept falling asleep on the job. We are responsible for providing our citizens with clean water, and there could be severe consequences if the supervisor was asleep during a critical juncture of the job; we could become legally liable for contaminated water. The supervisor was reprimanded three times.... Yes, I frequently use feedback but it has to be immediate. If not, the entire situation becomes difficult.”

But this manager also admits, “Confronting people is difficult. I learned that ignoring the situation is a big mistake. You have to be upfront and direct with people.” A second senior manager from the Midwest discussed the need for a sit down session and mild rebuke when responding to employees’ bad habit of swearing: “We just talk to them

about it. Employees swearing at one another, using the “f” work a couple of times. We also put it in writing; a note in their files.” A third respondent used counseling with mixed success, sometimes ending in separation from the public service, “In my experience one-on-one counseling and discussion regarding bad habits is how I dealt with managers’ bad habits. Managers tend not to be informed of their bad habits; this is a mechanism to inform them. In some instances it helped and in others it did not help. In the instances it did not help, it was already time to recommend a release of duty from his/her job function.”

A fourth senior manager from a Western city also used feedback stressing the need for positive reinforcement of good habits: “Complimenting on good habits is important: ‘You handled that well,’ and ‘I am proud of you using your good judgment.’” He cautions, however, that when dealing with bad habits “In my opinion yelling and belittling never works. I don’t think I promote an office with yelling and screaming.... This is definitely a bad strategy and should never be used. I try to discourage all my employees from using this strategy.”

Table 4 examines perceptions of organizational performance. These items are consistent with current interests in organizational performance. Many respondents have favorable assessments of their city’s performance. For example, 75.2% of respondents agree or strongly agree that they have a strong customer orientation, and 64.3% of them agree or strongly agree that they use up-to-date information technology applications. In addition, slightly more than half, 58.6% agree or strongly agree that their organizational productivity is high.

[ Insert Table 4 About here ]

The relationships between habits, habit management strategies and performance are best examined through a structural equation model. Figure 2 is one of several models that can be shown which produce similar insights. Figure 2 satisfies the usual goodness-of-fit test assumptions for such causal models. The variance-covariance matrix is consistent with that of the data (Chi-square = 20.4,  $p > .05$ ), the RMSEA is .043 (under the norm of .05), the Goodness of Fit Index is .966, and the AGFI is .924, both exceeding the threshold of .90, and the maximum Modification Index is 4.2. The TLI value is 0.92, exceeding the .90 threshold and the CFI is .096, indicating good incremental fit, although NFI is .84, which is slightly below this recommended threshold (though marginally acceptable). The PNFI value of .482 compares favorably with competing models. Figure 2 shows the effect sizes of the variables. Those along the dotted lines are not significant at the customary 5% or 1% levels, but are shown because of theoretical interest. Deleting these relationships does not significantly alter the findings in Figure 2.

[ Insert Figure 2 About here ]

Figure 2 suggests the following important conclusions. First, whereas good habits are associated with direct, increased perceptions of organizational performance, bad habits are not. The impact is shown by the dotted arrow which is not statistically significant. Rather, the impact of bad managerial habits should be foremost understood as making it more difficult to adopt positive management habits which, hence, affect organizational performance. The total standardized effects of good habits and bad habits on performance are of similar magnitude, but of opposed signs; +.451 versus -.395.

Therefore, it can be said that the presence of bad habits among just a few managers can cancel out the effect of good habits among most.<sup>11</sup> The possibility of bad management impacting city performance is also mentioned by interviewees.

Second, the model shows a strong, direct negative impact of bad habits on good habits; the presence of bad habits makes it indeed more difficult to adopt good habits. The model also shows that the impact of good habits on bad habits is not statistically significant, which, too, is consistent with the above findings. In short, when it comes to reducing bad habits, hands-on work of working with managers is required. Third, the model confirms the above finding that problem awareness is significantly associated with reduction in bad management habits. It has the largest impact of all variables shown. The other habit strategies are, in turn, significantly associated with increased use of these effective strategies of increasing awareness.<sup>12</sup>

Beyond these main findings, Figure 2 has other results. It shows that higher organizational performance is associated with few management strategies and policies that aim to reduce bad management behaviors and improve good behaviors. The most likely reason is that high performance requires fewer of them; indeed, the standardized impact of good habits on such management and policy is -.107, compared to the impact of performance of -.217. Figure 2 also shows that bad management habits increase the prevalence of rude employee behavior, which is consistent with theories of subordinate's role modeling of their leaders. This was mentioned in the following interviews: a city manager from the Midwest observes: "Attitude works its way down the ladder," and a California manager said, "Persistent bad habits can be problematic because managers set the tone in the administration. It is likely to spread to employees." A senior manager in a Western city echoes this: "Managers will be imitated by their employees. If a manager continuously comes into work late, employees will imitate their manager and come into work later. This will impact productivity in the office." Finally, Figure 2 also shows that the impact of fear on performance is not significant and is measured by the item "managers and employees are careful about what they say."

## **Conclusion**

This article finds that managerial habits affect organizational performance – good habits raise performance, and bad habits reduce it. Bad management habits are significantly present in about 45% of cities, and most commonly involve managers being overly passive, judgmental, defensive, intimidating, closed-minded or tardy in their performance. Senior managers use a broad range of strategies in dealing with these bad habits, notably providing immediate and frequent feedback which may include pointing out what change is needed, challenging the manager to change work habits, and collecting evidence that supports the need for change. Many cities also report that managers have many good habits, such as being pro active and setting high standards. Good habits contribute to positive performance, and bad habits detract from it. This study finds that the presence of bad habits among just a few managers can cancel out the effect of good habits among most.

Astute managers must address the issue of bad habits. As noted by one interviewee, "there has to be a good manager to recognize bad habits." A second interviewee goes further, "Being blunt and direct is the best strategy after recognizing bad habits." But what else is required of a good or astute manager? These two quotes

correctly identify the key to addressing habits: first, awareness of their existence, and, second, having the skills to address them. It is necessary to understand and recognize bad habits for what they are—impediments to the achievement of organizational missions and objectives which are often intractable and embedded in the informal routines, social networks and rules of organizations. It is important that organizations provide general guidelines to managers on the types of behaviors that are appropriate. Many times, managers think that intimidating their employees and placing more demands on them somehow guarantees a more productive work environment. Unfortunately, such habits can lead to high burnout rates and conflicts among management and staff. It is also important for all employees to be informed of good and bad habits through employee training, policies, team or group meetings, and performance appraisals. This will allow for managers and staff to recognize and distinguish bad habits.

It must be acknowledged, however, that habits have a double-edge quality: it is often effective to routinize work practices (e.g., SOPs) and managers frequently encourage habitual ways of doing things. Such habits help explain how those in an organization respond to the tasks they face. When top management seeks to introduce change to the organization, habit-based work practices can facilitate or hinder the change initiative. If much of a person's work like is spent in a "habit zone," a shock is required to liberate them from this pattern of behavior. Senior managers acting as change agents committed to improving productivity need to first identify positive and negative work habits and devise the appropriate "shock" strategies to cultivate or reinforce positive habits and reduce or correct negative ones. This process of detection and correction requires mastery of behavior modification techniques and change management tools as well as a willingness to employ these strategies to improve performance.

The consequences of bad habit management may well be more than that examined in this study. For example, workplace stress is exacerbated by the bad habits of managers. Stress in the workplace can lead to higher turnover rates, high levels of absenteeism, and overall poor work performance. Bad habits can also lead to conflict among managers and staff. For example, when managers fail to provide support, assistance or understanding to those under their supervision, such habit-based work practices can induce stress, ignite conflict and harm performance. Similarly, managers who habitually fail to communicate sufficiently or effectively or who are routinely unwilling to delegate tasks or responsibilities can cause workplace stress on the part of subordinate managers or supervisors. Social relationships have been found to be crucial components of workplace stressors (see e.g., Lindorff, 2001), and poor social habits (e.g., rude, abrupt, abrasive, contentious) can be a hindrance to subordinates in doing their job, which can add to their stress. Intervention strategies are needed in such cases, whether through formal mentoring or leadership development programs, to address poor workplace habits that heighten stress, foment conflict and dampen productivity.

Bad habits have not received much attention in the public administration literature. While the literature notes positive habits in connection with creating high performance organizations, the time has come to acknowledge that many organizations fall short of this ideal. These barriers need to be better understood and researched, so that they can be addressed; bad managerial habits are an important barrier to high performance. Future research needs to begin by acknowledging that habit-based work practices are pervasive, that achieving measurable improvements is complex, but that

successful change is possible. It needs to focus more on the relationship between bad habits and employee performance. The research should emphasize the importance of communication. Open communication allows for top management and employees to give corrective feedback to managers with bad habits. Case studies, field reports, survey-based research and other quantitative or qualitative methodologies can be used to further identify the ways in which habit-based work practices impact productivity or stress in the government workplace and the managerial strategies which successfully reinforce positive work habits and correct negative habits. Achieving a better understanding of the role of workplace habits is crucial if we are to achieve the robust, high performing public organizations—alert, nimble, flexible, and adaptable--extolled in the academic and professional literature.

## References

- Ashworth, K. 2001. *Caught Between the Dog and the Fireplug, or How to Survive in Public Service*. Washington, D.C.: Georgetown University Press, 2001.
- Barrier, M. 1999. Discovering the Habits of Well-Regarded CEOs. *Nations Business* 87, 3 (March): 15.
- Beatty, S. & Kahle, L. 1988. Alternative Hierarchies of the Attitude-Behavior Relationship: The Impact of Brand Commitment and Habit. *Journal of the Academy of Marketing Science* 16, 2:1-10.
- Berman, E. 2006. *Performance and Productivity in Public and Nonprofit Organizations*. Armonk, NY: M.E. Sharpe.
- Berman, E. and Korosec, R. 2005. Planning to Coordinate and Coordinating the Plan: Evidence from Local Governments. *American Review of Public Administration* 35, 4: 380-401.
- Berman, E. and West, J. 2003. What is Managerial Mediocrity? Definition, Prevalence, and Negative Impact (Part 1). *Public Performance & Management Review* 27, 2: 9-29.
- Brookfield, D. 2000. Management Styles in the Public Sector. *Management Decision* 38, 1: 13-18.
- Buckingham, M. and Coffman, C. 1999. *First, Break All the Rules*. NY: Simon-Schuster.
- Cohen, S. and Eimicke, W. 2002. *The New Effective Public Manager*. San Francisco, CA: Jossey-Bass.
- Covey, S. 1990. *The 7 Habits of Highly Effective People*. NY: Simon & Schuster.

- Covey, S. and Pofeldt, E. 2000. Profile. (Interview with Franklin Covey Co's. President Stephen R. Covey. *Success* 47, 1: 38-43.
- Datz, T. 2003. 6 Habits of Highly Effective CIOs. *CIO* 16, 17 (June 15): 72. *Commercial Training*. 34, 1: 21-27.
- Denhardt, R., Denhardt, J. and Aristeguieta. 2002. *Managing Human Behavior in Public And Nonprofit Organizations*. Thousand Oaks, CA: Sage.
- Finkelstein, S. 2004. The Seven Habits of Spectacularly Unsuccessful Executives. *Ivey Business Journal Online* (January/February): 1.
- Garvin, D. 2000. *Learning in Action: A Guide to Putting the Learning Organization to Work*. Boston, MA: Harvard Business School Press.
- Goldsmith, S. and Eggers, W. 2004. *Governing by Network*. Washington, D.C. Brookings.
- Groner, D. 1997. The Habits of Highly Ethical Insurance Professionals. *National Underwriter Life & Health-Financial Services Edition*. 101, 13 (March 31): 19, 21.
- Guy, M. 2004. The Human Side of Productive Work Environments. In M. Holzer and S-H. Lee, eds. *Public Productivity Handbook*. 2<sup>nd</sup> ed. NY: Marcel Dekker: 447-462.
- Haddock, P. 1997. Secrets for Getting Things Done: Develop Work Habits that Stress Success, Not Ineffectiveness. *Incentive*. 171, 10 (October): 120-121.
- Hays, S. and Kearney, R. 2001. Anticipated Changes in Human Resource Management: Views from the Field. *Public Administration Review* 61, 5: 485-597.
- Holzer, M. and S-H. Lee, eds. 2004. *Public Productivity Handbook*. NY: Marcel Dekker.
- ICMA. 2005. *Municipal Yearbook 2005*. Washington, D.C.: International City/County Management Association.
- Kahle, L. 1984. *Attitudes and Social Adaptation: A Person-Situation Interaction Approach*. Oxford: Pergamon.
- Kahle, L. & Beatty, S. 1987. The Task Situation and Habit in the Attitude-Behavior Relationship: A Social Adaptation View. *Journal of Social Behavior and Personality* 2 (2, part 1: 219-232.
- Kahle, L., Kulka, R. and Klingel, D. 1980. Low Adolescent Self-Esteem Leads to Multiple Interpersonal Problems: A Test of Social Adaptation Theory. *Journal of*

- Personality and Social Psychology* 29 (September): 496-502.
- Keelin, T. and Arnold, R. 2002. Five Habits of Highly Strategic Thinkers: Strategic Perspective—The Ability to Step Back and See the Big Picture. *Journal of Business Strategy* 23, 5: 39-42.
- Kincaid, W. 1996. Habits of Effective Safety Managers. *Occupational Hazards*. (November): 41-43.
- Kraus, S. 2002. *Psychological Foundations of Success*. San Francisco, CA: ChangePlanet Press.
- Leeds, D. 1996. How to Work Smarter, Not Harder. *National Underwriter Life & Health-Financial Services Edition*. 41 (October): 21.
- Lewin, K. 1947. Frontiers in Group Dynamics. *Human Relations* 1:5-41.
- Lewis, C. and Gilman, S. 2005. *The Ethics Challenge in Public Service*. San Francisco, CA: Jossey-Bass.
- Light, P. 1999. Does Management Matter? *Government Executive* 31, 2: 6.
- Light, P. 2005. *The Four Pillars of High Performance: How Robust Organizations Achieve Extraordinary Results*. NY: McGraw-Hill.
- Lindorff, M. 2001. Are They Lonely at the Top? Social Relationships and Social Support Among Australian Managers. *Work and Stress* 15, 3: 274-282.
- Lubit, R. 2004. The Tyranny of Toxic Managers: Applying Emotional Intelligence To Deal with Difficult Personalities. *Ivey Business Journal* 68, 4: 1-7.
- McDonald, T. 1998. Eye-Opener—New Circumstances Require New Ways of Thinking. *Successful Meetings* (July): 20.
- Neiman, R. and Thomson, H. 2004. Execution Plain and Simple: You Can Make Great Execution a Habit. *Canadian Manager* 29, 3: 17-19.
- Neu, C. 1997. 10 Habits of Highly Effective Councils. *Public Management*. 79, 11: 4-9.
- Nutt, P. 2002. *Why Decisions Fail*. San Francisco, CA: Berrett-Koehler.
- Nutt, P. 2004. Prompting the Transformation of Public Organizations. *Public Performance & Management Review* 27, 4: 9-33.
- Olshfski, D. and Levine, H. 2004. Organizational Change and Innovation. In M. Holzer And S-H. Lee, eds. *Public Productivity Handbook*. NY: Marcel Dekker: 593-609.

- Pollock, T. 1997, July. Bad Habits That May be Holding You Back. *Automotive Manufacturing & Production*. 109, 7: 13-14.
- Pritchard, 2006. *Professional Integrity: Thinking Ethically*. Lawrence, KS: University Press of Kansas.
- Rosner, B.1999. Building Trust is a Good HR Habit. *Workforce*. 78, 1 (January): 25-7.
- Sebenius, J. 2001. Six Habits of Merely Effective Negotiators. *Harvard Business Review* 79, 4 (April): 87-95.
- Shafritz, J., Rosenbloom, D., Riccucci, N., Naff, K., Hyde, A. 2004. *Personnel Management in Government*. 5<sup>th</sup> ed. NY: Marcel Dekker chapter 8.
- Sullivan, D. and Martin, M. 2001. Habit Formation and Story Telling: A Theory for Guiding Ethical Action. *Technical Communication Quarterly* 10, 3: 251-272.
- Urch Druskat, V. and Wolff, S.B. 2001. Building the Emotional Intelligence of Groups. *Harvard Business Review* March: 81-90.
- Yang, J. and Mossholder, K. 2004. Decoupling Task and Relationship Conflict: The Role of Intragroup Emotional Processing. *Journal of Organizational Behavior* 25: 589-605.
- Van Wart, M. 2004. Training and Development for Productivity. In M. Holzer and S-H. Lee, eds. *Public Productivity Handbook*. NY: Marcel Dekker: 529-549.
- Van Wart, M. 2005. *Dynamics of Leadership in Public Service*. NY: M.E. Sharpe.
- Van Zijl, C. 1999. Sharpening Up Social Skills. *Credit Management* (November): 22-23.
- Vogelsang-Coombs, V. 1997. Governance Education: Helping City Councils Learn: *Public Administration Review* 57, 6: 490-500.
- Waldroop, J. & Butler, T.. 2000a. Managing Away Bad Habits. *Harvard Business Review* 78, 5 (September): 89-98.
- Waldroop, J. & Butler, T. 2000b. *The 12 Bad Habits that Hold Good People Back*. NY: Doubleday.
- West, J. and Berman, E. 1997. Administrative Creativity in Local Government. *Public Productivity & Management Review* 20: 446-457.
- Wittenbraker, J., Gibbs, B., and Kahle, L. 1983. Seat Belt Attitudes, Habits, and

Behaviors: An Adaptive Amendment to the Fishbein Model. *Journal of Applied Social Psychology* 3 (September/October): 406-421.

Young, K. 2006. *The Seven Habits of Servant Leaders*. Refresher Publications.  
<http://www.refresher.com/!ksyservant.html> (accessed on May 17, 2006).

TABLE 1: MANAGERIAL HABITS – NEGATIVE

*Among managers and supervisors who report directly to me, there are one or more who regularly are....”*

	Agree <sup>1</sup>	-- Somewhat Agree	-- Disagree	Disagree <sup>2</sup>	DK
<i>Work Passivity</i>					
passive and unwilling to take needed action.....	10.9	22.4	13.2	49.4	4.0
unable to complete work on time.....	6.9	14.9	19.0	56.3	2.9
repeatedly late for work or meetings .....	6.4	11.0	13.9	65.3	3.5
indecisive and unwilling to take a stand .....	5.2	13.8	20.1	58.6	2.3
<i>Collaboration</i>					
overly judgmental of the shortcoming of others .....	19.0	20.1	16.1	40.3	4.6
overly aggressive and intimidating to others .....	14.4	19.0	17.8	46.5	2.3
willing to blame their failures on others .....	8.0	9.8	21.8	55.7	4.6
willing to claim credit for the accomplishments of others...	9.2	12.1	16.1	60.3	2.3
distrustful of the motives of other team members .....	4.7	18.0	12.2	61.0	4.1
a source of unnecessary conflict with team members .....	5.2	9.2	16.2	68.2	1.2
unwilling to compromise with others .....	2.3	7.5	25.4	62.4	2.3
<i>Ideas and Information</i>					
defensive and unable to accept criticism .....	9.8	17.8	21.3	48.3	2.9
closed to new ways of doing things.....	3.4	15.5	19.5	59.8	1.7
prone to make hasty decisions without due deliberation .....	3.4	10.3	26.4	56.9	2.9
unwilling or unable to listen attentively .....	2.9	9.2	19.5	67.8	0.6
<i>Self-management</i>					
perform their job well some days but poorly on other days.	4.6	10.9	23.0	56.3	5.2
unable to keep promises.....	2.9	6.9	16.1	69.5	4.6
unable to control his/her temper .....	2.3	8.6	14.9	70.3	2.9
knowingly make unreasonable demands .....	1.7	4.6	14.9	75.3	3.5
does not recognize the impact of their feelings on their actions	1.1	3.9	33.7	55.1	6.2

1) Includes Strongly Agree and Agree

2) Includes Disagree and Strongly Disagree

Cronbach alpha scores of index variables are 0.79 (work passivity), 0.87 (work collaboration & people relations), 0.79 (ideas and information) and 0.65 (self-management). The aggregate index has alpha = 0.90

Figure 1: Bad Habits Among Senior Managers

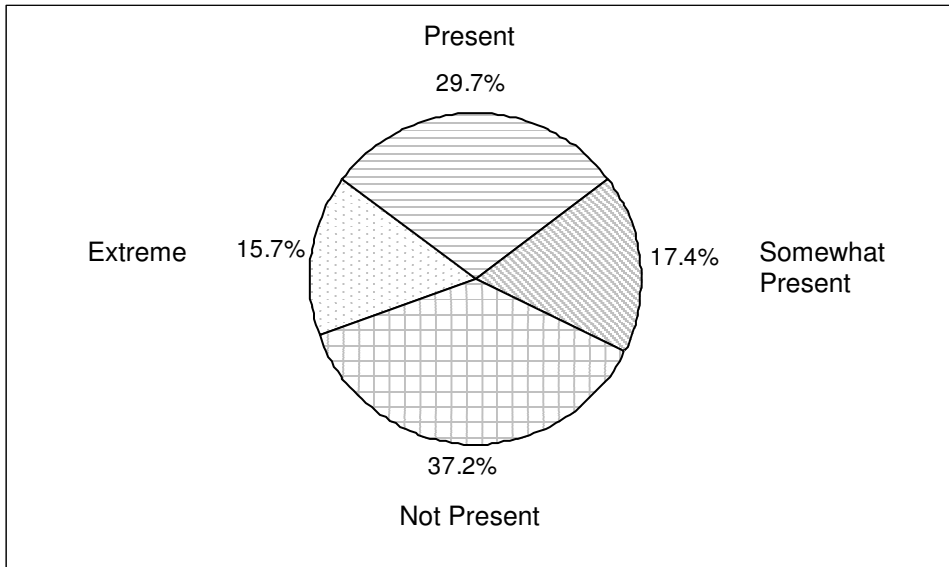


TABLE 2: MANAGERIAL HABITS – POSITIVE

“Managers and supervisors who report directly to me regularly...”

	Agree or Strongly Agree	Association with Bad Habits
<i>Work Productivity</i>		
work efficiently in getting the job done.....	76.6	-.381**
set high standards for themselves .....	77.0	-.290**
demonstrate proper motivation at work .....	71.7	-.213**
show initiative and are pro-active in decision-making .....	68.5	-.348**
are flexible and quick to adapt.....	55.6	-.303**
<i>Index</i> .....	68.0	-.392**
<i>Work Collaboration &amp; People Relations</i>		
demonstrate civility, courtesy and decency .....	88.6	-.211**
show concern for the personal well being of team members.....	85.7	-.239**
demonstrate a caring attitude toward others .....	79.8	-.231**
contribute their “fair share” on collaborative tasks.....	74.3	-.298**
work effectively with other managers and supervisors.....	74.7	-.371**
seek the input of those affected by decisions.....	69.1	-.266**
listen to others’ views before making any judgments.....	55.4	-.174**
<i>Index</i> .....	83.0	-.345**
<i>Ethics</i>		
take a stand where issues of ethics are at stake.....	86.9	-.178**
safeguard confidential information.....	86.9	-.295**
refuse to comply with unethical requests.....	82.9	-.196**
consider the rights of others in making decisions .....	80.0	-.267**
avoid conflicts of interest.....	79.5	-.236**
<i>Index</i> .....	87.4	-.294**

Cronbach alpha scores of index variables are 0.80 (work productivity), 0.86 (work collaboration & people relations), 0.74 (ethics). The aggregate index has alpha = 0.80

Agree or Strongly Agree for index variables defined as scores between 1.0 and 2.5

TABLE 3: HABIT MANAGEMENT

*“In your experience with your current organization, which of the following actions have you undertaken in relation to another manager or supervisor reporting to you?”*

	Yes
<i>Awareness – problem identification</i>	
pointed out what change is needed .....	89.2 %
challenged the manager to change work habits .....	76.4
called attention to negative effects of bad work habits.....	65.9
gathered evidence to support that change was needed in work habits.....	60.8
stressed that not changing some habits is unacceptable .....	53.4
escalated my admonishments to alter work habits .....	37.9
encouraged acknowledgement that current work habits were “bad” .....	35.2
<i>Index</i> .....	59.8
<i>Awareness – solution identification</i>	
openly discussed with the manager the importance of good work habits .....	60.8
shared stories of success and difficulties in changing work habits .....	55.7
provided information about managerial “good” work habits.....	49.4
created a motivating vision of what new work habits will produce.....	48.9
insured that the manager had knowledge and skills to change work habits .....	47.7
brainstormed as a management team to identify desirable work habits .....	46.0
told a manager to look towards a promising future with good work habits.....	34.7
showed how change in work habits advances shared values.....	25.0
<i>Index</i> .....	46.0
<i>Management</i>	
set explicit goals for new work habits managers need to achieve .....	56.3
celebrated the success of changed work habits .....	53.4
encouraged the manager to take the first step in changing work habits .....	53.4
redesigned work in ways that prompt changed work habits .....	40.3
provided incentives for continuing with positive work habits.....	35.2
provided evidence that changed work habits were successful.....	35.2
provided a coach to work one-on-one to support new work habits .....	27.8
proceeded step-by-step in the direction of improved work habits .....	20.5
separated the manager from influences that reinforced bad habits.....	14.8
<i>Index</i> .....	37.4
<i>Policy</i>	
included work habits as a criterion in performance appraisal.....	61.9
built good work habits into the organizational culture .....	59.7
included work habits as a criterion in promotion decisions .....	45.5
instituted training programs that stress good work habits .....	42.0
used management development programs to cultivate good work habits .....	40.9
established organizational standards to institutionalize good work habits .....	40.3
rewarded managers for good habits and punished for bad habits .....	37.5
<i>Index</i> .....	46.8

Cronbach alpha scores of index variables are 0.81 (problem identification), 0.77 (solution identification), 0.74 (management work), 0.76 (policy). The aggregate index has alpha = 0.82

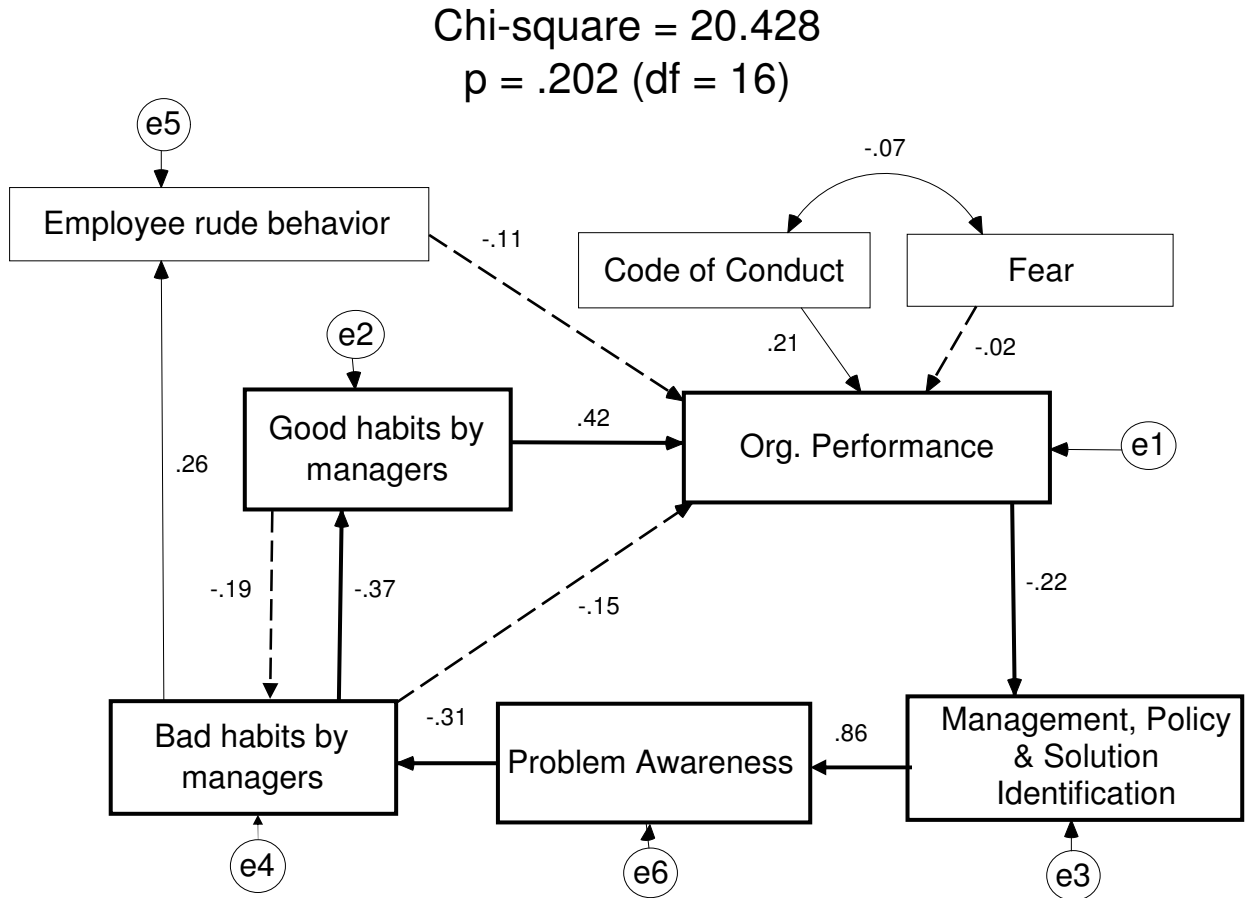
TABLE 4: OUTCOMES

*“In our city...”*

	Agree	Agree Somewhat	Disagree <sup>2</sup>	DK
<i>Performance</i>				
we have a strong customer orientation .....	75.2	17.6	5.3	1.9
collaboration with community leaders is good .....	75.2	19.5	3.9	1.4
organizational productivity is high .....	58.6	28.6	9.1	3.8
we use up-to-date information technology applications .....	64.3	20.0	15.2	0.5
we frequently develop new, innovative programs .....	58.1	28.6	11.4	1.9
citizen trust in local government is high .....	47.6	29.5	18.1	4.8

Cronbach alpha of this index variable is 0.85 .

Figure 2: Impact Of Habit Management On Managerial Habits



<sup>1</sup> For example, Lubit discusses four types of toxic managers: narcissistic, aggressive, rigid and impaired managers. For each type, he focuses on symptoms, subordinate survival strategies and superior actions for dealing with them. Similarly, Waldroop and Butler (2000a) analyze the bad habits of six types that they label: the hero, the meritocrat, the bulldozer, the pessimist, the rebel and the home run hitter and briefly consider some ways to “manage away” these habits.

<sup>2</sup> . When prompt to consider their habits, people may rationalize that a reason that little thought is given to a habit is because it has served them well in the past or because they are following some social convention.

<sup>3</sup> GE’s Change Acceleration Process (CAP) focused on “making change stick” and included a seven-step model of change: leading change (requires a committed champion), creating a shared need (communicates the rationale for change), shaping a vision (conveys desired behavioral outcomes), mobilizing commitment (building support), making change last (developing short plus long-term plans), monitoring progress (installing metrics), and changing systems or structures (reinforcing change) (Garvin, 2000: 131). These various step-by-step approaches can help to guide the habit management initiatives of organizations seeking improved performance.

<sup>4</sup> . As is common, survey participation is a bit lower in the Northeast than elsewhere in the country.

<sup>5</sup> . The categories are based theoretical considerations, and are supported by measures of internal reliability (alpha) shown in Table 1. Construct validity is evidenced as follows. For example, the index of ideas & information is associated with such items as “making consequential decisions unilaterally” ( $\tau\text{-}c=.358$ ,  $p < .01$ ), the index of collaboration is associated with “being uncomfortable in social situations” ( $\tau\text{-}c=.415$ ,  $p < .01$ ), and the index of self-management is correlated with “managers are not well attuned to their feelings” ( $\tau\text{-}c=.278$ ,  $p < .01$ ). While none of these individual items constitute aspects of the index measures, they do correlate with them as might be expected, hence, providing construct validity to the measures.

<sup>6</sup> . If one (1) somewhat agree is included as constituting a jurisdiction in which managers have bad habits (including of course, any cities that agree or strongly agree), then an additional 11.5% should be added for a total of 74.3% of cities. If three (3) somewhat agree are required, then 7.2% should be subtracted, yielding 55.6% of cities. Beyond this, different definitions can also shift percentages among categories, of course, but sensitivity analyses does not suggest changes by more than about 6%.

<sup>7</sup> . Note that the item lead-in is worded differently in Tables 1 and 2. Table 1 concerns bad habits among at least one manager, whereas Table 2 concerns good habits among managers that report to the respondent. This is appropriate, as the prevalence of just a few managers with bad habits can have a strong impact on senior managers’ team (the expression “one bad apple spoils the barrel” is apt here), whereas good habits are widely seen as required among all or most members for the purpose of high performance.

<sup>8</sup> . In fact, very few disagree to any extent with these statements. The percentage of those who strongly agree, agree or somewhat agree is at least 95% for each of these items.

<sup>9</sup> . Alpha measures are shown in Table 2.

<sup>10</sup> . Also, among the 340 possible pairs of correlations between items in Tables 1 and 2, 270 pairs are statistically significant.

<sup>11</sup> . The simple, bivariate relationship between bad habits and performance is significant ( $\tau\text{-}c= -.233$ ,  $p < .05$ ), hence, further supporting the importance of using this causal model approach.

<sup>12</sup> . The alpha measure of this index variable (shown in Figure 2) which comprises these three index three variables is .787 .