As the U.S. Congress searches for ways to remain proficient, while cutting expenditures in an effort to decrease the federal deficit, federal government employee furloughs could become more widely implemented. In order to sustain productivity within the U.S. Government federal civilian service while implementing furloughs, supervisors could benefit from a better understanding of how furloughs affect the organizational commitment (OC) and organizational citizenship behavior (OCB) of federal government employees. The purpose of this study was to determine the effect of federally mandated furloughs on the OC and OCB of federal government employees. To answer this question, a nonexperimental survey study was conducted on federal government civilian employees and active duty military employees. By identifying the negative effects associated with furloughs, managers can more effectively address such things as decreases in morale, lowered productivity rates, and increases in employee turnover.

DOI: http://dx.doi.org/10.22594/dau.15-740.24.01
Keywords: retention, motivation, sequestration, layoffs, productivity
Introduction to the Problem

Furloughs in private companies and government organizations have become more frequent since the U.S. economic downturn of 2008 (Brutocao & Marshall, 2011; Halbesleben, Wheeler, & Paustian-Underdahl, 2013; Shannon, 2010). The organizational effects of furloughs, including both the positive and negative impacts associated with them, have been studied (Halbesleben et al., 2013; Hohman, Packard, Finnegan, & Jones, 2013; Lee & Sanders, 2013; Osborne, Smith, & Huo, 2013; Shannon, 2010). Federal civilian service furloughs implemented by the U.S. Government often are short-term, such as those that occur when Congress misses a budget deadline or fails to pass a continuing resolution. Because of the unique culture of federal agencies and the potential for federally mandated involuntary furloughs to occur in the future, additional research on how furloughed employees’ organizational commitment (OC) and organizational citizenship behavior (OCB) change in response to implemented furloughs could prove beneficial to supervisors.

Researchers question the long-term effects of furloughs and argue that the implementation of furloughs can be counterproductive (Duggan, Lewis, & Milluzzi, 2010; Halbesleben et al., 2013). Two examples of this counterproductivity are reduced employee efficiency and diminished employee morale (Badiru, 2014). OC is perpetuated by the employees’ level of desire to stay with that organization (Elias, 2007). If furloughs have a negative effect on OC, the outcome may lead to higher turnover rates and more expenditure for hiring and training new employees.

OCB is an employee’s actions contributing to and supporting a larger social and psychological atmosphere within the organization (Bolino, Klotz, Turnley, & Harvey, 2013). Employees with high OCB go above the general requirements of their job, often going out of their way to help others within the organization. If furloughs have a negative effect on the OCB of employees, the organization
could suffer lower morale and productivity because employees have lowered their contribution to a larger social and psychological atmosphere within the organization.

Kelman (2006) maintained that differences in human attitudes justify the need to identify differences among human circumstances across organizations. Government employees tend to have a greater sense of job security and feel more resentment in response to a breach of their psychological contract. Organizations, to remain competitive, must continuously alter organizational culture both to adapt to and to accept change (Cristian-Liviu, 2013). As more research is accomplished using federal government employees as participants, more results will become available on how federal employees react in different situations based not only on circumstances and attitudes but on varying kinds of internal organizational cultures.

**Definition of Terms**

**Federal Service Organization**
For this study, the term “federal service organization” will refer to an agency within the federal government that currently employs federal service employees. The federal government organization under study contained both active duty military personnel and federally employed civilians.

**Organizational Commitment**
For the purpose of this study, the term “organizational commitment” (OC) will refer to the employee’s belief in the values and mission of the organization and willingness to exert extra effort to support the success of the organization. Mowday, Steers, and Porter (1979) defined three aspects of OC. The first aspect is a strong connection with, and acceptance of, organizational values and goals. The second aspect is that employees who exhibit strong OC want to exert an extended amount of effort for the organization. The third aspect involves an employee’s strong desire to remain an active member of their organization. The three aspects of OC manifest in employee behaviors in devotion to their work and their desire to see the organization succeed. For the purpose of this study, the behaviors and attitudes of the employees under study, in relationship to the organization for which they work, will determine the depth of the employees’ OC. The OC portion of this
study will investigate the employees’ willingness to accept any job assignment to stay with the organization and the employees’ emotional connection to the fate of the organization.

**Organizational Citizenship Behavior**

For the purpose of this study, the term “organizational citizenship behavior” (OCB) is defined as an employee’s willingness to exert effort above their formal job description to support the goals and values of the organization. Gurbuz (2009) gave an in-depth definition of OCB as behavior that the organization does not require but that happens as a result of an individual’s free will to help others progress or achieve a task. He identified five components of OCB: altruism, conscientiousness, sportsmanship, courtesy, and civic virtue. Altruism is a selfless act done to help others. Conscientiousness is the act of effectively using time and going beyond the normal requirements of the role as defined by the normal behaviors within the organization. Sportsmanship is the act of enduring or accepting the difficulties of the work without complaint. Courtesy is the willingness to share information with others to prevent problems related to work. Civic virtue is the employee’s contribution to the life or success of the organization.

**Furlough**

For the purpose of this study, the term “furlough” will refer to the act of requiring employees to take an unpaid leave of absence from work. An examination of the limited research available on the effects of furloughs reveals a gap in the current body of knowledge. Research on furloughs falls exclusively in the areas of private companies and state governments, completely excluding employees of the federal government. In the instance studied for this article, U.S. Government federal civilian service employees were subjected to both scheduled furloughs due to sequestration and unscheduled furloughs due to an unexpected government shutdown.
Background of the Study

Private and public companies made more use of furloughs to reduce expenditures in 2010 than they have since World War II (Shannon, 2010). During March 2013, the President of the United States implemented sequestration to reduce the deficit by $80.5 billion (Ferrell, 2014). In response to sequestration, the Secretary of Defense ordered mandatory administrative furloughs for 624,404 civilians employed by the Department of Defense (DoD). Both military personnel and contractors associated with the DoD were exempt from furloughs. DoD civilian employees were initially required to take 11 unpaid days off work. The number of furlough days was reduced to 6 unpaid days during the months between July and September 2013.

Current research conducted on OC focuses on leader-member exchange theory and job satisfaction (Ariani, 2012). A positive correlation between leader-member exchange theory and OC suggests that strong leader-member relationships foster higher OC among employees. Employees who exhibit strong OC are more likely to stay with the organization during periods of distress such as organizational change (Elias, 2007).

Although OCB is not a formal job requirement, the behavior often has a positive effect on the functionality of the organization (Bolino et al., 2013). Recent research on OCB reveals that OC, job satisfaction, and trust are leading determinates of OCB (Gurbuz, 2009). If employees feel there is a breach of their psychological job contract, they could be less committed to the organization and experience less job satisfaction and lower productivity (Coyle-Shapiro & Conway, 2005; DelCampo, 2007; Nadin & Cassell, 2007; Shahnawaz & Goswami, 2011). To sustain trust among employees during times of economic hardship, organizations must be honest with their employees. Lee and Sanders (2013) maintained that employees who understand the economic reasoning behind furloughs are less likely to reduce productivity due to the implementation of furloughs. Participants in Lee and Sanders’ study felt furloughs were the best option for both the organization and themselves because their leadership communicated to them the fiscal state of their organization.
Purpose of the Study

The purpose of this survey study was to test the theory that employee OCB and OC are affected by furloughs among federal government employees. Participants were drawn from two groups: active duty military personnel who did not experience an involuntary furlough and federal civilian service employees who did experience an involuntary furlough. The first group of participants was exempt from furloughs. Participants in the second group were subjected to planned furloughs as a result of mandated federal government sequestration and unplanned furloughs as a result of a government shutdown in 2013 between October 1 and October 16. Furloughed government employees did receive back pay for the unplanned furlough period even though they did not work during the time of the government shutdown. Furloughed employees did not receive any pay for the six scheduled furlough days in 2013. Surveys were administered to both samples and were statistically compared. By recognizing how employees change their behavior in reference to furloughs, supervisors might be able to decrease the negative psychological effects associated with increased stress and the emotional exhaustion employees incur as a result of furloughs (Hohman et al., 2013).

Research Questions

Research question 1

How do furloughs implemented in a federal government agency affect employee OC?

$H_0$: Furloughs in a federal government agency have no statistically significant effect on employee OC.

$H_A$: $\mu_1 = \mu_2$ Where $\mu_1$ is the mean of nonfurloughed employees’ OC and $\mu_2$ is the mean of furloughed employees’ OC.

$H_A$: Furloughs in a federal government agency have a statistically significant effect on employee OC.

$H_A$: $\mu_1 \neq \mu_2$ Where $\mu_1$ is the mean of nonfurloughed employees’ OC and $\mu_2$ is the mean of furloughed employees’ OC.

Research question 2

How do furloughs implemented in a federal government agency affect employee OCB?
\( H_O: \mu_1 = \mu_2 \) Where \( \mu_1 \) is the mean of nonfurloughed employees’ OCB and \( \mu_2 \) equals the mean of furloughed employees’ OCB.

\( H_A: \) Furloughs in a federal government agency have a statistically significant effect on employee OCB.

\( H_A: \mu_1 \neq \mu_2 \) Where \( \mu_1 \) is the mean of nonfurloughed employees’ OCB and \( \mu_2 \) equals the mean of furloughed employees’ OCB.

**Methodology**

The methodological approach for this study was a nonexperimental survey-based quantitative design. The quantitative research methodology allowed the researcher to remain objective, not biasing the results of the
data with his perspective. Online surveys allowed the researcher to gather the data using participants from a federal government agency without the use of government time or equipment.

Sample Size

The sample size was calculated using the G*power3 Scientific Power Calculator (Faul, Erdfelder, Lang, & Buchner, 2007). The researcher calculated the sample size for an independent sample two-tailed t-test using the effect size, alpha error, power level, and allocation ratio. The effect size used to calculate the sample size was .8. The sample size was calculated using an alpha error of .05 and the power level used was .95. The allocation ratio was 1, and the population size for the agency under study was 209. The total sample size calculated for the study was 84, with 42 furloughed participants and 42 nonfurloughed participants.

The organization granted permission to conduct the study on December 13, 2013. Organizational permission was granted with the contingency that employees were not allowed to complete the survey at work during work time or using government equipment. The study yielded a total of 87 combined responses from active duty military and federal civilian service employees. The nonfurloughed group represented by active duty military members yielded a total of 43 responses with 42 usable responses. The furloughed group represented by federal civilian service employees yielded 44 total responses with 43 usable responses. The total number of usable completed responses collected was 85.

Instrumentation/Measures

Organizational Commitment Questionnaire. The instrument used to measure the OC of participants for this study was the OC questionnaire developed by Mowday et al. (1979). The OC questionnaire consists of nine
statements that participants rated on a seven-point Likert scale reflecting how much they agreed with the statement. The OC questionnaire contained nine positively worded items (Mowday et al.). The scale consisted of 1 = “Strongly Disagree,” 2 = “Moderately Disagree,” 3 = “Slightly Disagree,” 4 = “Neither Agree or Disagree,” 5 = “Slightly Agree,” 6 = “Moderately Agree,” and 7 = “Strongly Agree.” A score of 63 on the instrument indicates the highest OC and a score of 9 indicates the lowest OC. The OC questionnaire is an open-source survey instrument and does not require permission for use.

Organizational Citizenship Behavior Scale. The instrument used to measure OCB in this study was the OCB scale developed by Smith, Organ, and Near (1983). The OCB scale consists of 16 items with three questions negatively worded and reverse scored. The instrument uses a five-point Likert scale: 1 = “Never,” 2 = “Seldom,” 3 = “Occasionally,” 4 = “Often,” and 5 = “Almost Always.” The three negatively worded and reverse-scored items were “take undeserved work breaks,” “coast toward the end of the day,” and “a great deal of time spent with personal telephone conversations.”

The OCB scale measures two dimensions of OCB: altruism and general compliance. Seven items on the scale are used to determine altruism, and the remaining nine items are used to measure general compliance. A score of 80 on the OCB scale indicates maximum OCB, and a score of 16 indicates minimum OCB. The researcher obtained permission to use the OCB scale from Dr. Janet Near (personal communication, August 14, 2013).

Data Analysis

Organizational Commitment. Data were analyzed using a two-tailed independent sample t-test. The nonfurloughed group contained 42 usable surveys completed by active duty participants. The furloughed group consisted of 43 usable surveys completed by civil service employees. The first test used the OC questionnaire to calculate a significance value between the two samples in Statistical Package for the Social Sciences (SPSS) version 21. Rejection of the null hypothesis occurred if the significance value of the two means was less than or equal to the alpha value of .05. Failure to reject the null hypothesis occurred if the significance value of the two means was greater than the probability value of .05.

Organizational Citizenship Behavior. To determine the statistical difference of OCB between the furloughed and nonfurloughed federal government employees, the data were analyzed using a two-tailed independent samples t-test for combined OCB, altruism, and general compliance. The OCB scale was used to calculate a significance value between the two samples in SPSS version 21. Three areas of OCB were analyzed using the OCB scale.
The first area examined by the OCB scale was the combined scores, which indicated the overall OCB for furloughed and nonfurloughed employees. The second area was the altruism of furloughed and nonfurloughed federal government employees. The third area was general compliance for furloughed and nonfurloughed employees. Rejection of the null hypothesis occurred if the significance value of the two means was less than or equal to the probability value of .05. Failure to reject the null hypothesis occurred if the significance value of the two means was greater than the probability value of .05.

## Results

### Organizational Commitment

SPSS version 21 was used to calculate the means, standard deviation, and standard error mean of data collected from furloughed and nonfurloughed federal government employees using the OC questionnaire (Table 1). The mean score for nonfurloughed employees was 5.198 and for furloughed employees was 4.494. The standard deviation for nonfurloughed employees was 1.244 and for furloughed employees was 1.358. The standard error of the mean for nonfurloughed employees was .192 and for furloughed employees was .207.

| TABLE 1. ORGANIZATIONAL COMMITMENT GROUP STATISTICS |
|-----------------|----------|-----------------|-----------------|
| Group           | N        | Mean            | Standard Deviation | Standard Error Mean |
| Nonfurlough     | 42       | 5.198           | 1.244             | .192               |
| Furlough        | 43       | 4.494           | 1.358             | .207               |

An independent samples $t$-test was calculated at a confidence interval of 95% in SPSS version 21 using the data collected with the OC questionnaire. The results of the two-tailed independent samples $t$-test are presented in Table 2. The $p$-value calculated for OC between furloughed and nonfurloughed employees, with equal variance assumed, was .015, indicating $p < .05$. “Sig (2-tailed)” represents the $p$-value in Table 2. The effect size was calculated using Cohen’s $d$. The effect size calculated for the OC portion of this study was .548, indicating a medium effect size.
<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variance</th>
<th>Sig</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
<th>Mean Difference</th>
<th>Standard Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Cohen's $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal Variance Assumed</td>
<td>.157</td>
<td>2.494</td>
<td>83</td>
<td>.015*</td>
<td>.7049</td>
<td>.2826</td>
<td>.1428, 1.2669</td>
<td>.548</td>
</tr>
<tr>
<td>Equal Variance Not Assumed</td>
<td></td>
<td>2.497</td>
<td>82.665</td>
<td>.015</td>
<td>.7049</td>
<td>.2823</td>
<td>.1433, 1.266</td>
<td></td>
</tr>
</tbody>
</table>

Note. *$p < .05$
The results of the study indicate the difference in OC between furloughed and nonfurloughed employees is statistically significant and does not support the null hypothesis. The results of the independent samples t-test performed for OC indicate furloughs have a statistically significant effect on the OC of federal civilian service employees.

**Organizational Citizenship Behavior**

SPSS version 21 was used to calculate the means, standard deviation, and standard error mean of data collected from furloughed and nonfurloughed federal government employees using the OCB scale (Table 3). The mean score for nonfurloughed employees was 3.787 and for furloughed employees was 3.493. The standard deviation for nonfurloughed employees was .563 and for furloughed employees was .448. The standard error of the mean for nonfurloughed employees was .087 and for furloughed employees was .068.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonfurlough</td>
<td>42</td>
<td>3.787</td>
<td>.563</td>
<td>.087</td>
</tr>
<tr>
<td>Furlough</td>
<td>43</td>
<td>3.493</td>
<td>.448</td>
<td>.068</td>
</tr>
</tbody>
</table>

An independent samples t-test was calculated at a confidence interval of 95% in SPSS version 21 using the data collected with the OCB scale. The results of the two-tailed independent samples t-test are presented in Table 4. The p-value calculated for OCB between furloughed and nonfurloughed employees, with equal variance not inferred, was .009, indicating $p < .05$. “Sig (2-tailed)” represents the p-value in Table 5. The effect size was calculated using Cohen’s $d$. The effect size calculated for the OCB portion of this study was .579, indicating a medium effect size.
<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variance</th>
<th>Sig</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
<th>Mean Difference</th>
<th>Standard Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Cohen's d</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal Variance Assumed</td>
<td>.038</td>
<td>2.672</td>
<td>83</td>
<td>.009</td>
<td>.2945</td>
<td>.1102</td>
<td>.0753 .5137</td>
<td>.579</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal Variance Not Assumed</td>
<td>2.665</td>
<td>78.190</td>
<td></td>
<td>.009*</td>
<td>.2945</td>
<td>.1104</td>
<td>.0744 .5114</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05
The results of the study indicate the difference in OCB between furloughed and nonfurloughed employees is statistically significant and fails to support the null hypothesis. The results of the independent samples $t$-test performed for OCB indicate furloughs have a statistically significant effect on the OCB of federal government employees.

**Organizational Citizenship Behavior: Altruism**

The researcher then used the same method to analyze only the items on the OCB scale designed to measure altruism. SPSS version 21 was used to calculate the means, standard deviation, and standard error mean of collected data pertaining to altruism from furloughed and nonfurloughed federal government employees using the OCB scale (Table 5). The mean score for nonfurloughed employees was 3.582 and for furloughed employees was 3.259. The standard deviation for nonfurloughed employees was .737 and for furloughed employees was .609. The standard error mean for nonfurloughed employees was .114 and for furloughed employees was .093.

<table>
<thead>
<tr>
<th>Group</th>
<th>$N$</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonfurlough</td>
<td>42</td>
<td>3.582</td>
<td>.737</td>
<td>.114</td>
</tr>
<tr>
<td>Furlough</td>
<td>43</td>
<td>3.259</td>
<td>.609</td>
<td>.093</td>
</tr>
</tbody>
</table>

An independent samples $t$-test was calculated at a confidence interval of 95% in SPSS version 21 using the data collected with the OCB scale altruism items. The results of the two-tailed independent samples $t$-test are presented in Table 6. The $p$-value calculated for OCB altruism items between furloughed and nonfurloughed employees, with equal variance not inferred, was .031, indicating $p > .05$. “Sig (2-tailed)” represents the $p$-value in Table 6. The effect size was calculated using Cohen’s $d$. The effect size calculated for the OCB altruism portion of this study was .477, indicating a medium effect size.
The results of the study indicated the difference in altruism between furloughed and nonfurloughed federal government employees is not statistically significant and supports the null hypothesis. The results of the independent samples $t$-test performed for OCB altruism indicate furloughs do not have a statistically significant effect on the altruism characteristic of OCB of federal civilian service employees.

**Organizational Citizenship Behavior: General Compliance**

The researcher analyzed only the items on the OCB scale designed to measure general compliance using a two-tailed independent sample $t$-test. SPSS version 21 was used to calculate the means, standard deviation, and standard error mean of collected data pertaining to general compliance from furloughed and nonfurloughed federal government employees using the OCB scale (Table 7). The mean score for nonfurloughed employees was 3.747 and for furloughed employees was 3.674. The standard deviation for nonfurloughed employees was .517 and for furloughed employees was .458. The standard error mean for nonfurloughed employees was .080 and for furloughed employees was .070.

<table>
<thead>
<tr>
<th>Group</th>
<th>$N$</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonfurlough</td>
<td>42</td>
<td>3.747</td>
<td>.517</td>
<td>.080</td>
</tr>
<tr>
<td>Furlough</td>
<td>43</td>
<td>3.674</td>
<td>.458</td>
<td>.070</td>
</tr>
</tbody>
</table>

- **Table 6. Organizational Citizenship Behavior Altruism Independent Samples $t$-test**

<table>
<thead>
<tr>
<th>$t$</th>
<th>$df$</th>
<th>Sig (2-tailed)</th>
<th>Mean Difference</th>
<th>Standard Error Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Cohen's $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.197</td>
<td>79.425</td>
<td>.031*</td>
<td>.3225</td>
<td>.1468</td>
<td>.0304 - .6146</td>
<td>.477</td>
</tr>
</tbody>
</table>

Note. *$p > .05$
An independent samples *t*-test was calculated at a confidence interval of 95% in SPSS version 21 using the data collected with the OCB scale general compliance items. The results of the two-tailed independent samples *t*-test are presented in Table 8. The *p*-value calculated for OCB general compliance items between furloughed and nonfurloughed employees, with equal variance not inferred, was .012, indicating *p < .05*. “Sig (2-tailed)” represents the *p*-value in Table 8. The effect size was calculated using Cohen’s *d*. The effect size calculated for the OCB general compliance portion of this study was .558, indicating a medium effect size.

### Table 8. Organizational Citizenship Behavior General Compliance Independent Samples *t*-Test

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>t</em></td>
<td>df</td>
<td>Sig (2-tailed)</td>
<td>Mean Difference</td>
<td>Standard Error Difference</td>
<td>95% Confidence Interval of the Difference</td>
</tr>
<tr>
<td>2.572</td>
<td>81.285</td>
<td>.012*</td>
<td>.2727</td>
<td>.1060</td>
<td>.0617</td>
</tr>
</tbody>
</table>

Note. *p < .05*

The results of the study indicated the difference in general compliance between furloughed and nonfurloughed federal government employees is statistically significant and does not support the null hypothesis. The results of the independent samples *t*-test performed for OCB general compliance indicate furloughs have a statistically significant effect on the general compliance characteristic of OCB of federal government employees.

### Discussion

#### Organizational Commitment

The results of the OC questionnaire revealed an average mean score of 4.494 for furloughed federal government employees and 5.198 for nonfurloughed federal government employees. The OC of furloughed employees was significantly lower than nonfurloughed employees. A closer look at the data reveals that nonfurloughed employees ranked higher in OC on all items listed on the survey except item number three (Figure 1).
Item number three on the OC questionnaire states, “I would accept almost any type of job assignment in order to keep working for this organization.” Active duty military members representing the nonfurloughed sample of the study may have indicated that they would not accept almost any other type of job assignment in order to continue working for their current organization because they did not have as much time invested in their careers as did civilian employees making up the furloughed sample for the study. Most civilian employees participating in the study were retired from active duty military service. Many of the civilian employees who participated in the study had obtained civilian jobs in career fields similar to those they had when they worked in the military. In addition, active duty military members tend to be more mobile, moving to a new duty station every 4 years on the average. This mobility gives the active duty military employees more flexibility in terms of changing organizations within the same branch of the military when compared to civilian workers.

“Employees who were required to take furlough days may have felt less security within their jobs, fearing more permanent measures to cut expenditures such as downsizing.”

The highest occurrence of differences between furloughed and nonfurloughed federal government employees in terms of OC were items number two and four on the questionnaire. Item number two states, “I talk up the organization to my friends as a great organization to work for.” Item number four states, “I find that my values and the organization’s values are very similar.” The fact that both of these items scored significantly lower among furloughed employees when compared to nonfurloughed employees could indicate animosity towards the organization as a result of furloughs. Employees who were required to take furlough days may have felt less security within their jobs, fearing more permanent measures to cut expenditures such as downsizing. Furloughed employees may have felt there was no justification for furloughs and that their values were no longer in line with organizational values.
FIGURE 1. MEAN SCORES FOR ORGANIZATIONAL COMMITMENT

1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
2. I talk up this organization to my friends as a great organization to work for.
3. I would accept almost any type of job assignment in order to keep working for this organization.
4. I find that my values and the organization’s values are very similar.
5. I am proud to tell others that I am part of this organization.
6. This organization really inspires the very best in me in the way of job performance.
7. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
8. I really care about the fate of this organization.
9. For me this is the best of all possible organizations for which to work.

Organizational Citizenship Behavior

The results of the OCB scale indicated an average mean score of 3.493 for furloughed federal government employees and 3.787 for nonfurloughed federal government employees. The average mean score for furloughed employees was significantly lower than for nonfurloughed employees in the federal government agency under investigation (Table 3). Of the 16 items on the OCB scale, furloughed employees ranked higher than nonfurloughed employees on only three items.
Furloughed federal civilian service employees ranked higher in OCB on items two, six, and 13 on the OCB scale. These items were “punctuality,” “attendance at work is above the norm,” and “make innovative suggestions to improve department.” Factors such as age and career experience could have influenced the items on which furloughed employees scored higher than nonfurloughed employees. The sample for nonfurloughed employees contained active duty military members with more diversity in both age and experience than federal civilian service employees who made up the furloughed sample of participants.

Many U.S. Government federal civilian service employees are retired enlisted active duty military members who tend to be older with more work experience than active duty military members, many of which are just starting their military careers.

Many U.S. Government federal civilian service employees are retired, enlisted military members. They tend to be older and to have more work experience than active duty military members, many of whom are just starting their military careers. These differences in work experience and age, between furloughed and nonfurloughed employees, could explain why punctuality, attendance, and suggestions to improve the department contradict the comparative scores of the remaining 13 items on the OCB scale.

**Organizational Citizenship Behavior: Altruism and General Compliance**

The study found no statistically significant difference between furloughed and nonfurloughed employees in the altruism dimension of OCB. The average mean calculated for altruism using the OCB scale for nonfurloughed employees was 3.582 and for furloughed employees was 3.259. Although the results were not statistically significant for altruism, furloughed employees did rank lower in altruism than those not furloughed (Figure 2).
1. Help others who have been absent
3. Volunteer for things that are not required
5. Orient new people even though it is not required
7. Help others who have heavy workloads
12. Assist supervisor with his or her work
13. Make innovative suggestions to improve department
15. Attend functions not required but that help the organization image

The general compliance dimension of OCB did reveal a statistically significant difference between furloughed and nonfurloughed federal government employees. Nonfurloughed employees had an average mean of 3.747 for general compliance on the OCB scale, while furloughed employees scored an average mean of 3.674 (Figure 3). Furloughed employees may have lowered their OCB after the furlough period because of an increase in individual workloads. Although furloughed employees were required to take time off without pay during the furlough period, their workload did not change, forcing them to accomplish the same amount of work with less time on the job. It is important to stress that furloughed employees, due to legal implications, were prohibited from working (including telecommuting) during required furlough periods.
FIGURE 3. MEAN SCORES FOR ORGANIZATIONAL CITIZENSHIP BEHAVIOR: GENERAL COMPLIANCE

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Furlough Not Present</th>
<th>Furlough Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Punctuality</td>
<td>5.0000</td>
<td>4.0000</td>
</tr>
<tr>
<td>4. Take undeserved breaks (reverse scored)</td>
<td>3.0000</td>
<td>2.0000</td>
</tr>
<tr>
<td>6. Attendance at work is above the norm</td>
<td>2.0000</td>
<td>1.0000</td>
</tr>
<tr>
<td>8. Coast toward the end of the day (reverse scored)</td>
<td>1.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>9. Give advance notice if unable to come to work</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>10. Great deal of time spent with personal telephone conversations (reverse scored)</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>11. Do not take unnecessary time off from work</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>14. Do not take extra breaks</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>16. Do not spend time in idle conversation</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

**Implications**

The implications of the results of this study contribute to the broader body of knowledge concerning furloughs, OC, and OCB among federal civilian service employees. Very little research had been conducted on furloughs’ effects on federal civilian service employees in the areas of OC and OCB. This study finds that furloughs do have an effect on federal civilian service employees and opens the door for future research on this subject.

Because government employees tend to have a greater sense of job security, as pointed out by Kelman (2006), furloughed employees may have resented their furloughs due to a perception of injustice. This study finds that federal civilian service workers who had recently endured a mandated furlough had
lower OC and OCB than those that had not been subjected to a mandated furlough. Without a perception of justification for furloughs among its employees, the federal government could experience higher turnover rates in the future. A high turnover period could prove detrimental to the federal government because the organization relies heavily on the specialized career fields. A large loss of specialized experience within the federal government could make the effect of furloughs counterproductive in the long run, due to an increase in training costs.

Recent research has found that it is difficult to change employee perceptions of negatively viewed organizational practice (Totawar & Nambudiri, 2014). Nurturing traits of self-efficacy, optimism, hope, and resilience in employees might ease the negative impact of furloughs on the employees and the organization. The federal government could perhaps reduce the negative impact of furloughs by communicating more effectively. Early communication with employees about the potential for furloughs to occur could give employees the opportunity to prepare financially and to adjust their workload in an effort to offset the possibility of stress.

Limitations

One limitation of this study is the comparison of results collected from civilian employees and active duty military employees. The majority of federal civilian service employees were furloughed at some point during 2013, but active duty military members were not subjected to a furlough during this time. The study does not take into account the two groups’ demographic
differences that could have affected the outcome. The study assumes the statistical differences in OC and OCB are the result of the mandated furloughs. Examples of differences between the groups are median age, career experience, and formal job requirements.

The higher OC and OCB of active duty military compared to federal civilian service employees may be because they have more mobility within their formal job requirements. Active duty military have more opportunities to move around to various positions within their organization or to other organizations within the same branch of service when compared to federal civilian service employees. Mobility gives active duty military members the opportunity to seek a good organizational fit, whereas federal civilian service employees lack the same freedom.

Another limitation is that the study methodology does not consider the two groups’ internal cultural differences, which exist even though the groups were members of the same organization. The study did not account for the collectivist culture of active duty military members. Differences in the way participants view their obligation to their occupation could have influenced the outcome of this study. Active duty military members may feel a greater sense of commitment to their occupation out of patriotism to their country. Individuals belonging to a collectivist culture tend to take OCB more for granted as a part of their performance than members of a more individualist culture (Lam, Chun, & Law, 1999). The difference between the collectivist culture of active duty military members and the more individualist culture of civilian employees could be another explanation for the disparity of OC and OCB results between the two groups.

A third limitation is the use of a small sample size from a small population within the much larger organization of the federal government. The results of this study are valid based on the sample size for the population of the organization under study. In order for the results to be a true representation of the federal government, however, a much larger sample across multiple organizations within the federal government would have to be surveyed.

A final limitation of this study was the self-reporting methodology used to collect data. Participants rated items based on their perception of their OC and OCB. Participants could exaggerate their level of commitment or OCB for various reasons, such as to make their situation appear worse than it actually is or to appear either more or less committed to their organization than their colleagues. To address this limitation, future researchers could solicit employee managers to complete the surveys based on their employees’ behavior. Another option is to conduct a field test on a number of
organizations, utilizing the same survey for the same purpose, in an effort to further validate the use of self-reporting with the OC questionnaire and OCBs scale.

**Recommendations for Future Research**

Future research conducted on the impact furloughs have on the OC and OCB of federal civilian service employees should take into consideration the limitations of this study. To address those limitations and to improve the understanding of the effect furloughs have on the OC and OCB of federal civilian service employees, this section will provide recommendations for future research. To address the limitation of comparing active duty military members to civilian employees, the researcher recommends a longitudinal study conducted during a furlough period and a period without furloughs. A longitudinal study will enable the researcher to conduct the study on the same organization using only federal civilian service employees. Such a study would eliminate any organizational or occupational differences between divergent groups of employees that could have affected the outcome of this study.

The researcher also recommends that future studies use a larger sample size to ensure external validity. Repeated studies across multiple organizations within the federal government could further validate the findings of the research conducted in this study. A larger study with a similar methodology would provide a much broader understanding of how furloughs affect the OC and OCB of federal government employees without the internal organizational influences of a single organization.

A study of furloughs’ effects on organizational factors such as productivity and turnover rates could benefit practitioners in the decision-making process. Because this study found that OC and OCB are negatively affected by furloughs, future research could investigate the relationship between furloughs, OC, OCB, and organizational productivity. With more information on how furloughs affect employee productivity and turnover rates, administrators will be able to make more educated decisions on how to implement furloughs while minimizing loss of organizational assets.

More research conducted on mandated furloughs utilizing federal civilian service employees could prove useful to both scholars and practitioners due to unique qualities in career fields, job requirements, employee stressors, and organizational culture. Future research in the area of furloughs in the federal government could reveal more effective methods to reduce the employee stress and anxiety brought on by feelings of uncertainty in the wake of furloughs. A final recommendation for future research is
to investigate ways to reduce the negative effects of furloughs on federal civilian service employees. One avenue for future research could be to investigate the relationship between positive reinforcement, furloughs, OC, and OCB.

**Conclusion**

The results of this study show that furloughs have a negative effect on the OC and OCB of U.S. Government federal civilian service employees. A reduction in OC and OCB due to furloughs could lead to lower production and higher turnover rates, resulting in higher expenditures. Because the U.S. Government has had very few substantial furloughs in the recent past, there is very little research on how U.S. Government federal civilian service employees react to a sustained mandated furlough.

Managing the effects of furloughs within the federal government is an exceptional challenge for both supervisors and their employees because most furloughs are unplanned due to a failure to pass a budget or continuing resolution. Although unpredictability is inevitable, supervisors and employees can take steps to minimize the stress caused by both planned and unplanned furloughs. Supervisors can encourage employees to plan for furloughs financially, and they can implement open door policies to address concerns about the stressors accompanying furloughs, such as increased workloads before and after the furlough. Administrators within the federal government should continue to gather information in an effort to understand how to implement furloughs successfully with minimum strain on organizations and employees. It is in the best interest of the U.S. Government to proactively retain a productive and dedicated workforce while finding ways to meet the financial challenges that lie ahead.
References


**Biography**

**Dr. Robert L. Shepherd** is employed as an airfield systems maintenance technician at Eglin Air Force Base in Florida. He recently graduated from Capella University with a PhD in Organizational Management and Leadership. His dissertation concentrated on the effect that federally mandated furloughs have on the commitment of federal civilian service workers. He graduated with a master’s degree in Organizational Management from Troy University in 2008.

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