The Effect of Obedience Pressure and Perceived Responsibility on Management Accountants’ Creation of Budgetary Slack

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ABSTRACT: This study evaluates management accountants’ susceptibility to inappropriate obedience pressure to create budget slack in violation of corporate policy. We also evaluate links between pressure effects and perceived responsibility, decision justifications, and underlying ethical dimensions. The results of an experiment with 77 management accountants reveal that despite pervasive perceptions of ethical conflict, almost half of the participants violated explicit policy and created budgetary slack when faced with obedience pressure from an immediate superior. The results also indicate that participants who added slack to their initial budget recommendation found themselves less responsible for their budget decision than did participants who refused to add slack. In addition, a majority of the participants indicated that the creation of budgetary slack was unfair, unjust, and/or contrary to their duties.

Data Availability: The data used in this study are available upon request from the authors.

INTRODUCTION

The objective of this study is to evaluate the extent that obedience pressure from a superior to create budgetary slack in violation of corporate budget policy affects management accountants’ budget recommendations. Obedience pressure is a type of social influence pressure resulting when individuals with authority command other individuals’ behavior (Brehm and Kassin 1990; Lord and DeZoort 2001). We also extend the pressure literature in accounting by evaluating the extent that responsibility shifting is associated with the pressure-based budget decision. Finally, we evaluate ex post decision justifications to explore the underlying ethical dimensions of the pressure-based budget decision.

We appreciate helpful comments from Steven Kaplan (editor), two anonymous reviewers, Jeff Cohen, Dana Hermanson, Rich Houston, Jonathan Stanley, Kristy Towry, workshop participants at The University of Alabama and the University of Lethbridge, as well as participants at the 2003 AAA Annual Meeting and the 2003 Advances in Management Accounting Conference. We are also grateful for the support of the CMA Canada.
This research is motivated primarily by the need to improve our understanding of the professional and ethical conflicts that emerge when obedience pressure pushes individuals to behave in dysfunctional ways. While the literature provides evidence that auditors are vulnerable to inappropriate social influence, generally, (e.g., Ponemon 1992) and to inappropriate orders from superiors, specifically, (Lord and DeZoort 2001; DeZoort and Lord 1994), little is known about how professionals justify and attribute responsibility for their pressure-based judgments and decisions. Accordingly, this study extends the obedience pressure literature by evaluating management accountants’ decision justifications and the extent that their decisions and justifications are affected by their perceptions of responsibility.

The use of management accountants and a budgeting task also extends obedience pressure research in several ways. First, this study contributes to the literature by evaluating obedience pressure in an experiment where a historical norm of budget padding has become a counternorm after new corporate policy explicitly prohibits the practice. While previous studies (e.g., Buchheit et al. 2003; McNair 1991) consider ethical conflict and ambivalence associated with norms and counternorms, the pressure literature lacks consideration of norm-shifting on professional judgment and decision making. For example, previous obedience pressure studies have only used tasks designed to lack ethical ambiguity.

Second, previous obedience studies in accounting have focused only on external auditors dealing with public clients (Lord and DeZoort 2001; DeZoort and Lord 1994). In addition to basic differences in job responsibilities and constituents, the literature (e.g., Aranya and Ferris 1984; Safer 2002) suggests that management accountants face more professional-organizational conflict than public accountants. The use of management accountants in a budget slack task also addresses a need to better understand the antecedents of slack creation. Budget-setters have incentive to create slack to gain control over resources and/or to be viewed favorably when actual performance is reviewed (Lukka 1988). While slack creation is considered a norm in business (Dunk and Nouri 1998), it also represents a deliberate misrepresentation of facts to superiors (Lukka 1988; Douglas and Wier 2000; Webb 2002). Therefore, explicit pressure to create slack contrary to corporate budget policy is expected to create conflict for professionals who have a duty to adhere to high ethical standards.

Seventy-seven management accountants completed a budgeting task where a superior instructed them to violate corporate policy and inflate their initial budget recommendation. While most of the participants indicated that the creation of budgetary slack was unfair, unjust, and/or contrary to their duties, almost half created budgetary slack when under obedience pressure to violate corporate budget policy. While some participants acquiesced completely, a majority of the participants who created slack reached a compromise recommendation that complied neither with policy nor the immediate superior’s orders. We found that participants who added slack considered themselves less responsible for their decision than did participants who refused to add slack.

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1 Norms are belief sets that define appropriate behavior within an organization (Jansen and von Glinow 1985; McNair 1991). Counternorms involve rules and procedures that encourage inappropriate behavior.

2 The Institute of Management Accountants (IMA) states that its management accountants have “a responsibility to communicate information fairly and objectively ... and disclose fully all relevant information that could reasonably be expected to influence an intended user’s understanding of the reports, comments, and recommendations presented” (IMA 1997, Section 1c).

3 The IMA responded to ethical lapses by its management accountants by asking its members to sign a pledge of ethical conduct to reinforce its commitment to high ethical standards (IMA 2002).
The remainder of the paper is organized as follows. The next section provides the theoretical background needed to support the study’s predictions of obedience pressure and responsibility allocation effects. The third section describes the study’s method. The fourth section describes our results. The final section discusses the study’s implications and limitations.

HYPOTHESIS DEVELOPMENT

Figure 1 provides a conceptual overview of the theoretical relationships of interest in this study. Specifically, we adapt the general x-y-z model of pressure in accounting (DeZoort and Lord 1997) for our context to summarize the focal constructs and relationships in the study. As detailed in the sections that follow, we posit that inappropriate obedience pressure from a superior creates stress-based responsibility shifting within management accountants and motivates them to pad their initial legitimate budget recommendations in violation of explicit corporate policy. As detailed in the “Method” section, we also consider professional commitment, impression management, perceived pressure strength, and perceived decision difficulty as the individual-based control variables when assessing the effects of responsibility on budget recommendation.

Obedience Pressure Theory

The accounting research literature provides evidence that public accountants are susceptible to the adverse effects of obedience and other inappropriate social influence pressures (e.g., conformity pressure, compliance pressure).4 For example, previous research demonstrates that external auditors are likely to underreport project hours when they are subjected to compliance pressure (Lightner et al. 1982; Dirsmith and Covaleski 1985) and conformity pressure (Ponemon 1992). External auditors’ responses to obedience pressure have been examined in two experimental studies. DeZoort and Lord (1994) found that auditors were more likely to make unethical decisions when exposed to obedience pressure from superiors. They also found evidence of a positive link between the superior’s hierarchical status (partners versus managers) and the amount of influence. In a follow-up study, Lord and DeZoort (2001) found that obedience pressure influenced audit seniors to sign off on significantly higher unsubstantiated client balances than auditors in a control group.

The Budgetary Slack Problem

While the budgetary slack problem has received considerable attention in the management accounting literature (see Dunk and Nouri [1998] for a review of the budgetary slack literature), little is known about how managers perceive budgetary slack, how they respond to pressure to create slack in violation of explicit policy, and whether such pressure creates ethical ambivalence.5 Douglas and Weir (2000) highlighted the link between ethicality and slack creation in their survey of management accountants. However, their survey results do not indicate the direction of the association or provide evidence on the effects of explicit pressure to create slack.

The budget-setting process is subject to conflict because it is highly subjective and vulnerable to various types of influence (Merz and Groebner 1982; Lukka 1988). One of

4 Conformity pressure is the pressure to adhere to peer behavior or expectations. Compliance pressure is the pressure to acquiesce to explicit requests, regardless of the individual’s level of responsibility within the organization (DeZoort and Lord 1997).

5 Jansen and von Glinow (1985) state that ethical ambivalence results in situations where behaviors affected by the reward structure conflict with behaviors reflecting ethical values and judgments.
the primary conflicts for management accountants in a budgeting scenario is between corporate management’s desire for the budget to serve as a control feature and local management’s desire to secure an easily attainable budget. The management accounting literature includes consideration of the social influences and other incentives affecting the creation of budgetary slack. For example, Lukka’s (1988) model of budget slack determinants included social influence pressures such as perceived expectations by others and pressure from superiors.

Three studies have considered the link between social influence pressure and budget slack reduction. Young (1985) found that M.B.A. students under social pressure created less budgetary slack than students under no pressure.6 Frederickson and Cloyd (1998) linked knowledge of a superior’s expectations to undergraduate students’ slack creation, although they did not find the predicted positive link between social influence pressure and changes in slack creation. Finally, Stevens (2002) linked slack creation with concern for reputation and ethics, finding an inverse relation between concern for reputation and ethics and slack creation.

In this study, we examine whether inappropriate obedience pressure from an authoritative superior motivates management accountants to modify their initial legitimate budget recommendations to include slack. We predict that despite explicit new corporate policy prohibiting slack creation, management accountants under pressure from an authoritative

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6 Young (1985, 830–831) defined social pressure as “a feeling discouraging the subordinate from misrepresenting himself when a superior has information on the subordinate’s productive capability.”
superior will increase their initial budget recommendations in violation of explicit company policy. Stated formally:

**H1:** Management accountants under pressure from an authoritative superior to violate explicit corporate budget policy and create budget slack will provide budget recommendations that are higher than their initial estimates.

Previous obedience pressure studies in the accounting literature (e.g., DeZoort and Lord 1994; Lord and DeZoort 2001) have not evaluated the specific reasons for inappropriate judgments and decisions made under obedience pressure. We evaluate professionals’ decision justifications and assessments of decision responsibility to address this gap in the literature and to pursue understanding of both how and why some individuals succumb to pressure to commit acts they know to be inappropriate and some individuals resist such pressure.

Milgram’s (1974) obedience theory suggests that individuals subjected to obedience pressure will make decisions contrary to their own attitudes, beliefs, and values, in part, because they can remove themselves from responsibility for their judgments and decisions after an individual with authority directs them to an action. Similarly, attribution theory (e.g., Hewstone 1983; Myers 1987) holds that individuals who commit unethical acts tend to externalize attribution to other individuals or environmental factors. For example, Kaplan et al. (1988) found that tax evasion became more likely when individuals could attribute their behavior to being similar to what others would do. Similarly, Jansen and von Glinow (1985) linked norm-based behavior to accepting responsibility and counternorm behavior to avoiding responsibility. Accordingly, responsibility shifting is considered a critical antecedent to the decision to obey and behave unethically.

In this study, to the extent that the creation of budget slack is considered wrong, management accountants who violate an explicit budget policy when under obedience pressure are expected to have a stress response that involves shifting responsibility for their actions away from themselves and toward the pressuring superiors who instructed them to behave unethically. Accordingly, we predict that management accountants who obey their superior’s orders to ignore policy and inflate their initial budget recommendation will feel less responsible for their decision than professionals who refuse to inflate their initial recommendation. Stated formally:

**H2:** Management accountants who violate corporate budget policy and raise their initial budget recommendation will hold themselves less responsible for their decision than accountants who do not change their initial budget recommendation.

**METHOD**

**Experimental Materials**

We used an experimental task (provided in the Appendix) involving a manufacturing company with a traditional practice of inflating budget estimates by 10 percent to achieve annual bonuses and continue a longstanding record of coming in under budgeted spending limits. The participants assumed the role of a new accounting manager responsible for

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7 Milgram (1974, 146) posits that inappropriately obedient behavior “originates” from entering an agentic state that involves shifting responsibility from the self to others.
making budget recommendations and enforcing company-wide fiscal policies in what was either a randomly assigned centralized or a decentralized organizational structure. After receiving spending estimates for 2002, the participants were told their calculation for controllable overhead spending for the division was $4.5 million.

After a meeting where the CEO introduced a new company policy stating that budgets should be set as accurately as possible, the participants were told by their immediate superior that they should change their initial $4.5 million estimate to the previous year’s budget amount of $4.9 million. The superior stated that recommending anything less than last year’s budget would greatly increase the likelihood of coming in over budget, put the hourly workers’ bonuses in jeopardy, and reflect poorly on the entire division’s management team. The superior also highlighted that the conversation should be kept a secret. After the background scenario and pressure treatment, the participants were asked what overhead spending budget ($) amount they would recommend. Next, they were asked to “assign responsibility for your budget recommendation” using a 100-percent allocation method involving themselves, their superiors, and any other relevant parties they wanted to identify. Finally, the participants were asked to provide a specific point estimate for the percentage of their peers they believed would follow instructions to violate corporate policy and increase the budget recommendation from $4.5 million to $4.9 million.

Following the experimental case and questions, the participants answered a series of questions about the amount of pressure they perceived, whether the case presents them with an ethical dilemma, the extent that the scenario represented an ethical conflict, and whether they had encountered such a situation in practice. We also asked a manipulation check question about the identity of their immediate superior for evaluation and reporting purposes. Finally, the participants completed the Professional Commitment (PC) scale (Aranya et al. 1981) and the Impression Management (IM) scale (Paulhus 1984).

The 15-item PC scale was used to control for individual differences in professional commitment. Professional commitment involves the extent that individuals identify with a profession and avoid behaviors that could damage the profession or their own professional status (Mowday et al. 1979; Otley and Pierce 1996; Lord and DeZoort 2001). We posit that individuals with high professional commitment will be less likely to violate explicit corporate policy and create budget slack in response to an evaluating superior’s orders.

The 20-item IM scale (Paulhus 1984, 1991) is designed to measure systematic efforts to over-report behaviors that match the perceived desires of an evaluative audience. We used the measure to control for participants who are highly concerned with maintaining a positive impression with their evaluating superiors. Such individuals are expected to obey their superior’s inappropriate orders to a greater extent than individuals who are less concerned about maintaining a positive impression.

Participants and Administration

A total of 82 management accounting professionals from Canada and the U.S. participated in the study. All of the participants completed the experimental materials during scheduled meetings with one of the researchers. Five participants (6 percent) failed a manipulation check question involving the identification of the superior who evaluates their decisions.

8 No significant main or interaction effects were found involving organizational structure. Accordingly, this variable is omitted from subsequent analysis.

9 No significant differences were found (at the 0.10 level) between the 67 Canadian and the 10 U.S. participants on any of the study’s measures.
performance. These individuals were omitted from subsequent testing, leaving 77 participants for the remainder of the analysis.\(^\text{10}\)

The participants averaged 33 years of age (S.D. = 6.59 years) and six years of accounting experience (S.D. = 4.73 years). A majority of the participants were male (54 percent) and employed by centralized organizations (69 percent). Most of the participants (67/77, 87 percent) were completing the final requirement for the CMA certification in Canada. Nine of the remaining ten participants were CPAs and/or CMAs. No significant between-group differences (licensed versus unlicensed) emerged (p > 0.10).

**RESULTS**

**Descriptive Results**

Overall, the participants indicated that the creation of budget slack is wrong. In debriefing questions, most of the participants (86 percent) responded “yes” when asked whether they “believe it is wrong to pad a budget to ensure that the budget is met.” In addition, the participants reported that it was unethical to obey the order to inflate the current budget recommendation to last year’s budget level (mean = 5.66, S.D. = 1.26 on a seven-point scale anchored “ethical” and “unethical”).\(^\text{11}\) Sixteen participants (21 percent) claimed they had been in a situation like the one presented in the case, while 46 participants (60 percent) indicated they had experience in a situation where a superior pressured them to do something they thought was wrong.

To assess the pressure treatment, we asked the participants how much pressure they would feel to follow the superior’s instruction if the situation was real. Using a 0–100 scale (anchored “None” and “A Great Deal”), the participants indicated they would feel a considerable amount of pressure (mean = 69.35, S.D. = 23.40). The participants also indicated that they would find it difficult to make a budget recommendation in this situation (mean = 57.23, S.D. = 27.32 on a 0–100 scale anchored “Not at All Difficult” and “Very Difficult”). Both mean scores are significantly greater than the scale midpoints of 50 (p < 0.05 in both cases).

We also asked the participants about the extent they perceived an ethical conflict and an ethical dilemma in the experimental setting. The results show that the participants agreed that the case presents an ethical dilemma. Using an 11-point scale (anchored −5 = “Strongly Disagree” and 5 = “Strongly Agree”), the mean response of 3.36 (S.D. = 1.86) is significantly greater than the indifference midpoint of 0 (p < 0.01). Similarly, the participants reported that they would have an ethical conflict if faced with this situation in practice. The mean response of 67.51 (S.D. = 27.00) on a 0–100 scale anchored “None at All” and “A Great Deal” also is significantly greater than the indifference midpoint of 50 (p < 0.01). Interestingly, the participants as a whole seemed ambivalent toward whistleblowing in the situation. When asked how likely they would be to report the superior’s order to pad the budget to another superior (on a 0–100 scale anchored “Not Likely” and “Very Likely”), the participants provide a mean response of 50.12 (S.D. = 29.19).

**Tests of Hypotheses**

Consistent with H1, the results in Table 1, Panel A, show that the participants’ mean budget recommendation of $4,618,831 is significantly higher than the initial budget estimate

\(^{10}\) Including the five participants who failed the manipulation check does not change any of the reported findings.

\(^{11}\) The mean ethicality score is significantly higher than the scale’s midpoint (t = 11.55; p < 0.001).
of $4,500,000 (p < 0.01).\textsuperscript{12} While 40 participants (52 percent) maintained their initial estimate of $4.5 million despite pressure to raise it, 37 participants (48 percent) raised their initial budget recommendation and created budget slack in violation of the CEO’s explicit instructions. Fourteen participants (18 percent) acquiesced completely to the obedience

\textbf{TABLE 1}

\textbf{Descriptive and Univariate Test Results}

\textbf{Panel A: Obedience Pressure Effects}\textsuperscript{a}

\begin{tabular}{|l|c|c|c|c|}
\hline
 & \textbf{Mean} & \textbf{S.D.} & \textbf{t}\textsuperscript{b} & \textbf{p-value} \\
\hline
\text{Obedience pressure group (n = 77)} & $4,618,831$ & $156,396$ & 6.67 & <0.01 \\
\hline
\textbf{Obedience Pressure Response Groups} & \textbf{n} & \% & \\
\hline
Total obedience ($4.9m$) & 14 & 18 & \\
Zone of Compromise ($>$4.5m and $<$4.9m) & 23 & 30 & \\
No obedience ($4.5m$) & 40 & 52 & \\
\hline
\end{tabular}

\textbf{Panel B: Zone of Compromise Results}

\begin{tabular}{|l|c|c|c|}
\hline
\text{Zone of Compromise Group (\$)} & \textbf{Mean} & \textbf{S.D.} & \textbf{Median} \\
\hline
& 4,658,696 & 72,929 & 4,700,000 \\
\hline
\end{tabular}

\begin{tabular}{|l|c|c|c|}
\hline
\text{Revised Budget Recommendation (\$)} & \textbf{Frequency} & \textbf{Percent} & \\
\hline
4,525,000 & 2 & 8.69 & \\
4,550,000 & 1 & 4.35 & \\
4,600,000 & 6 & 26.09 & \\
4,700,000 & 12 & 52.17 & \\
4,750,000 & 1 & 4.35 & \\
4,800,000 & 1 & 4.35 & \\
Total & 23 & 100.0 & \\
\hline
\end{tabular}

\textbf{Panel C: Responsibility (%) for Budget Recommendation}\textsuperscript{c}

\begin{tabular}{|l|c|c|c|c|c|}
\hline
 & \text{Participant} (Self) & \text{Pressuring Superior} & \text{CEO} & \text{Other} \\
\hline
\text{No obedience ($4.5 m$)} & \text{Mean}\textsuperscript{e} & 0.53 & 0.14 & 0.15 & 0.05 & \\
 & \text{S.D.} & (0.35) & (0.23) & (0.18) & (0.11) & \\
 & \text{n} & 40 & 40 & 40 & 40 & \\
\hline
\text{Zone of Compromise ($4.5 m < $4.9 m$)} & \text{Mean} & 0.47 & 0.23 & 0.17 & 0.04 & \\
 & \text{S.D.} & (0.31) & (0.23) & (0.12) & (0.07) & \\
 & \text{n} & 23 & 23 & 23 & 23 & \\
\hline
\text{Total obedience ($4.9 m$)} & \text{Mean} & 0.20\textsuperscript{d} & 0.49\textsuperscript{d} & 0.12 & 0.04 & \\
 & \text{S.D.} & (0.15) & (0.24) & (0.12) & (0.13) & \\
 & \text{n} & 14 & 14 & 14 & 14 & \\
 & \text{F} & 5.47 & 12.53 & 0.42 & 0.81 & \\
 & \text{p-value} & <0.01 & <0.001 & 0.66 & 0.92 & \\
\hline
\end{tabular}

\textit{(continued on next page)}

\textsuperscript{12} All reported p-values are two-tailed.
### TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Panel D: Control Variables Results</th>
<th>IM</th>
<th>PC</th>
<th>DIFFCLTY</th>
<th>PRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No obedience</strong> ($4.5 m)</td>
<td>Mean</td>
<td>85.30</td>
<td>77.95</td>
<td>56.55</td>
</tr>
<tr>
<td>S.D.</td>
<td>16.18</td>
<td>10.08</td>
<td>29.25</td>
<td>25.70</td>
</tr>
<tr>
<td>n</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td><strong>Zone of Compromise</strong> ($4.5 m &lt; $4.9 m)</td>
<td>Mean</td>
<td>83.55</td>
<td>75.78</td>
<td>55.96</td>
</tr>
<tr>
<td>S.D.</td>
<td>16.46</td>
<td>7.81</td>
<td>24.98</td>
<td>21.22</td>
</tr>
<tr>
<td>n</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total obedience</strong> ($4.9 m)</td>
<td>Mean</td>
<td>81.50</td>
<td>75.21</td>
<td>61.36</td>
</tr>
<tr>
<td>S.D.</td>
<td>12.65</td>
<td>7.92</td>
<td>26.82</td>
<td>13.16</td>
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<tr>
<td>n</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>F</td>
<td>0.32</td>
<td>0.68</td>
<td>0.19</td>
<td>3.59</td>
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<tr>
<td>p-value</td>
<td>0.73</td>
<td>0.51</td>
<td>0.83</td>
<td>0.03</td>
</tr>
</tbody>
</table>

*The dependent variable is the participants’ specific dollar ($) recommendations for the overhead spending budget.*

**Total obedience group:** participants increased their initial budget recommendation of $4.5m to $4.9m after being told to by a superior.

**No obedience group:** participants refused to change their initial $4.5m budget recommendation after being told to by a superior.

**Zone of compromise group:** participants increased their initial $4.5m budget recommendation, but not to $4.9m as ordered by a superior.

b One-sample t-test comparing group mean with initial budget recommendation of $4,500,000.

c Participants allocated 100 percent responsibility for their budget recommendation among themselves, the CEO, the CFO, the Division President, and any other relevant individuals they identified.

d Significantly different from “Zone of Compromise” mean and “No Obedience” mean (p < 0.01).

e The row totals do not total to 100 percent because some participants did not allocate all 100 percent of the decision responsibility.

Variable Definitions:

- **IM** = total score on the 20-item Impression Management scale, with each item measured on a seven-point scale (possible total score range 20–140);
- **PC** = total score on the 15-item Professional Commitment scale, with each item measured on a seven-point scale (possible total score range 15–85);
- **DIFFCLTY** = the perceived difficulty of the budget decision, measured on a 100-point scale anchored “Not at All Difficult” and “Very Difficult”; and
- **PRESS** = the perceived strength of the obedience pressure treatment, measured on a 100-point scale anchored “None” and “A Great Deal.”

pressure and provided a revised recommendation of $4.9 million. To benchmark the pressure-based responses, we compared the participants’ recommendations to the recommendations from a control group of 21 management accountants who did not receive an obedience pressure treatment.13 The control group’s mean budget recommendation of $4.48 million was not significantly different than the initial $4.5 million estimate (p = 0.47), but it was significantly lower than the obedience pressure group mean (p < 0.01).14

13 The instrument completed by the control group was identical to the primary experimental instrument except for the absence of the obedience pressure treatment. In addition, the experimental and control groups were comparable across demographic categories with two exceptions. First, the control group was younger than the experimental group (33 versus 38 years old, p < 0.05). Second, while most of the experimental group participants were completing their professional certification requirements, a majority (63 percent) of the control group participants had their professional certification.

14 The budget recommendation data for the control group is not normally distributed. While the one-sample t-test is reasonably robust to violations of the normality assumption, we also conducted a nonparametric one-sample signed rank test and found similar significant results.
Interestingly, almost one-third of the obedience pressure participants (23/77, 30 percent) provided a compromise recommendation between $4.5 and $4.9 million. While this zone of compromise neither reflects complete obedience to the superior’s instructions nor complete compliance with corporate policy, participants in this group indicated they felt a significantly greater level of ethical conflict (mean = 76.57, S.D. = 18.51) than the obedient participants (mean = 60.93, S.D. = 26.54) and the disobedient participants (mean = 64.60, S.D. = 30.33; p < 0.05 for both comparisons). The Table 1, Panel B results present the 23 compromise recommendations. A majority (52 percent) of the compromise participants recommended a midpoint budget amount ($4.7 million), suggesting relatively equal CEO and immediate superior influence. Alternatively, 39 (9) percent of the compromisers recommended budget amounts less (greater) than $4.7 million.

The responsibility results in Table 1, Panel C provide support for H2. The 14 participants in the total obedience group only considered themselves on average 20 percent responsible for the decision, significantly less than the mean self-assessed responsibility for the compromise and no obedience groups (47 percent and 53 percent, respectively; p < 0.01 in both cases). In addition, the total obedience participants assigned significantly more responsibility to the pressuring superior (49 percent) than did compromising and no obedience participants (23 percent and 14 percent, respectively; p < 0.001 in both cases). No significant differences emerged among groups in the amount of responsibility assigned to the CEO or to other groups (e.g., operational managers, department heads).

Table 1, Panel D provides descriptive results for the four control variables (i.e., impression management, professional commitment, perceived decision difficulty, and perceived obedience pressure strength). The results of a MANOVA indicate marginally significant control variable differences among the no obedience, compromise, and total obedience groups (Wilks’ Lambda = 1.95, p = 0.11). Subsequent univariate analysis reveals that the marginal multivariate result is driven by the significant differences in perceived obedience pressure among the three response groups (F = 3.59; p = 0.03).

The results in Table 2 provide correlation and multivariate regression results to evaluate the effects of personal responsibility on pressure-based budget recommendations after controlling for impression management, professional commitment, perceived decision difficulty, and perceived obedience pressure strength. To evaluate whether multicollinearity affects the results, we analyzed correlations and variance inflation factors (VIFs) among the variables. The correlation matrix in Panel A reveals that a majority of the correlations are low to moderate and not significant. In addition, none of the VIF scores exceeded 1.50, which is well below Neter et al.’s (1996) suggested threshold of 10.0. Given the relatively low correlations and low VIFs, we do not consider multicollinearity a problem.

The multinomial logistic regression results in Table 2, Panel B show that the regression model fit was significant ($\chi^2 = 18.52, p = 0.002$). As expected, the amount of self-assessed responsibility was negatively associated with the odds of being obedient (p < 0.002) after controlling for impression management, professional commitment, decision difficulty, and perceived obedience pressure.

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15 We used one-way ANOVA to evaluate differences among the no obedience, compromise, and total obedience groups in perceived responsibility for the budget decision, impression management score, professional commitment score, perceived decision difficulty, and perceived pressure.

16 We also found no significant between-group differences for the ethical conflict and ethical dilemma questions (p > 0.10 in both cases).
TABLE 2
Correlation and Regression Results
(n = 77)

Panel A: Correlation Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>BDGTAMT</th>
<th>RESPBLTY</th>
<th>IM</th>
<th>PC</th>
<th>DIFFCLTY</th>
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<tbody>
<tr>
<td>BDGTAMT</td>
<td></td>
<td>-.389**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESPBLTY</td>
<td>-.389**</td>
<td></td>
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<td></td>
<td></td>
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<td>IM</td>
<td>-.109</td>
<td>-.002</td>
<td></td>
<td></td>
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<tr>
<td>PC</td>
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<td>-.003</td>
<td>.097</td>
<td></td>
<td></td>
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<tr>
<td>DIFFCLTY</td>
<td>.093</td>
<td>-.253*</td>
<td>-.142</td>
<td>-.069</td>
<td>.392**</td>
</tr>
<tr>
<td>PRESS</td>
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<td>.013</td>
<td>-.187</td>
<td>-.136</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: Multinomial Logistic Regression Results

\[
BDGTPGP = b_0 + b_1RESPBLTY + b_2PRESS + b_3DIFFCLTY + b_4IM + b_5PC + \epsilon_i
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>Estimate</th>
<th>Chi-Square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPBLTY</td>
<td>H2 (−)</td>
<td>-2.57</td>
<td>9.82</td>
<td>0.002</td>
</tr>
<tr>
<td>Control Variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>+</td>
<td>-0.01</td>
<td>0.40</td>
<td>0.53</td>
</tr>
<tr>
<td>PC</td>
<td>-</td>
<td>-0.03</td>
<td>1.41</td>
<td>0.24</td>
</tr>
<tr>
<td>DIFFCLTY</td>
<td>?</td>
<td>-0.02</td>
<td>2.34</td>
<td>0.13</td>
</tr>
<tr>
<td>PRESS</td>
<td>+</td>
<td>0.03</td>
<td>7.03</td>
<td>0.01</td>
</tr>
</tbody>
</table>

\[
\chi^2 = 18.52; \ p = 0.002; \text{Pseudo } R^2 = 0.22
\]

*, ** p ≤ 0.05 and p ≤ 0.01, respectively.

Variable Definitions:

- **BDGTAMT** = budget recommendation amount ($);
- **BDGTPGP** = budget recommendation group, with 1 = no obedience ($4.5m), 2 = compromise (between $4.5m and $4.9m), and 3 = total obedience ($4.9m);
- **RESPBLTY** = percentage (%) of total responsibility the participants self-assigned for their budget recommendation;
- **IM** = total score on the 20-item Impression Management scale, with each item measured on a seven-point scale (possible total score range 20–140);
- **PC** = total score on the 15-item Professional Commitment scale, with each item measured on a seven-point scale (possible total score range 15–85);
- **DIFFCLTY** = the perceived difficulty of the budget decision, measured on a 100-point scale anchored “Not at All Difficult” and “Very Difficult”; and
- **PRESS** = the perceived strength of the obedience pressure treatment, measured on a 100-point scale anchored “None” and “A Great Deal.”

To learn more about the pressure-based budget decision, we asked the participants to provide specific justifications for their recommendation after receiving the obedience pressure treatment. The results in Table 3 provide insight into the underlying rationale for acquiescing or resisting the pressure to create slack. Panel A provides the primary justifications from the participants who obeyed their superior’s instructions by recommending a $4.9 million budget. A majority of the professionals in this group (n = 8) explained that they did what the superior told them to do, while others highlighted the need to achieve a

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17 Two of the researchers independently coded the participants’ explanations. Intercoder reliability was 0.94 and all coding differences were reconciled by the coders. In addition, two graduate students who were unassociated with the study coded a random sample of the explanations. The students’ intercoder reliability was 0.91 and their average intercoder reliability with the researchers was 0.93.
TABLE 3
Budget Decision Justifications
(n = 77)

Panel A: Total Obedience
(n = 14 w/budget recommendation = $4.9m)

<table>
<thead>
<tr>
<th>Justification</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I did what the superior told me to.</td>
<td>8</td>
</tr>
<tr>
<td>2. Important to meet budget for hourly employees</td>
<td>5</td>
</tr>
<tr>
<td>3. Amount is near last year’s budget</td>
<td>4</td>
</tr>
<tr>
<td>4. Someone else is responsible</td>
<td>3</td>
</tr>
</tbody>
</table>

Panel B: Zone of Compromise (n = 23)
(n = 23 w/budget recommendation = $4.5m < × < $4.9m)

<table>
<thead>
<tr>
<th>Justification</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Need to compromise</td>
<td>10</td>
</tr>
<tr>
<td>2. CEO directive/corporate policy</td>
<td>6</td>
</tr>
<tr>
<td>3. (tie) Budget should be challenging but attainable</td>
<td>4</td>
</tr>
<tr>
<td>3. (tie) Important to meet budget for hourly employees</td>
<td>4</td>
</tr>
</tbody>
</table>

Panel C: No Obedience
(n = 40 w/budget recommendation = $4.5m)

<table>
<thead>
<tr>
<th>Justification</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Padding is unethical/wrong</td>
<td>18</td>
</tr>
<tr>
<td>2. CEO directive/corporate policy</td>
<td>13</td>
</tr>
<tr>
<td>3. The initial recommendation is accurate</td>
<td>10</td>
</tr>
<tr>
<td>4. Higher budgets promote spending/Lower budgets save money</td>
<td>7</td>
</tr>
</tbody>
</table>

Some of the 77 participants provided more than one reason for their budget decision.

bonus for the hourly employees (n = 5) or to approximate the prior year’s budget (n = 4). Three participants explained that someone else was responsible for their recommendation.

The justifications in Table 3, Panel B, reveal that many (n = 10) of the participants who recommended a budget amount between $4.5 million and $4.9 million explicitly recognized the need to compromise in the situation. Four participants suggested the need to compromise by stating that the budget should be challenging but attainable. Interestingly, six participants indicated that their compromise recommendation reflected the CEO’s directive and corporate budget policy.

The Panel C results highlight the problems many professionals have with padding budgets. Almost half of the participants (45 percent) recommending a $4.5 million budget justified their recommendation by stating that budget padding is unethical and wrong. Thirteen participants stated that they were following corporate policy dictating accurate budgeting. Similarly, ten participants highlighted the accuracy of their initial recommendation.

To assess potential self-presentation bias effects, we asked the participants what percentage of their peers they believed would obey the order to inflate their initial budget recommendation by 10 percent (to $4.9 million). The results indicate significant differences (F = 18.79; p < 0.001) in perceptions of what peers would do among compliers, noncompliers, and compromisers, yet we found no clear evidence of a self-presentation bias effect.
Specifically, participants who refused to raise their initial budget recommendation predicted that only 39 percent of their peers would obey the order to create budget slack. Alternatively, participants who fully obeyed the order indicated that 83 percent of their peers would do the same thing. Finally, compromisers predicted that 64 percent of their peers would obey the order.\textsuperscript{18}

**DISCUSSION AND CONCLUSION**

This study’s findings have a number of implications. From a research perspective, the results extend the obedience pressure literature by focusing on the effects of perceived responsibility on professionals’ responses to obedience pressure in a norm-shifting task that can create ethical ambivalence. The explicit assessment of the responsibility explanation for inappropriate obedience to authority also tests the underpinnings of obedience theory in an accounting setting. Consistent with attribution theory and Milgram’s obedience theory, participants who raised their initial budget recommendation to $4.9 million found themselves less responsible for their decision than participants who did not raise their initial budget recommendation. Instead, participants who modified their initial recommendation assigned more responsibility for their decisions to the obedience pressure source.

The use of management accountants and a budgeting task also provides an opportunity to assess the generalizability of obedience pressure effects in the accounting profession. The results suggest that many management accountants are susceptible to even relatively weak experimental forms of pressure. In addition, we infer ethical ambivalence from the relatively large number of participants who modified their initial recommendation, reported relatively high levels of stress, and high levels of agreement that padding the budget is wrong.

From a practical standpoint, we highlight the finding that almost half of the participants under obedience pressure acquiesced and raised their initial honest budget recommendation in violation of explicit budget policy. This overall result seems particularly significant given that the vast majority of the participants perceived ethical conflict in the situation and considered the creation of budget slack wrong. We also highlight that the participants who entered the “zone of compromise” (McNair 1991) indicated a greater level of ethical conflict than participants who fully obeyed and participants who fully complied with policy. In effect, the compromise group failed to fully satisfy either constituent and felt the most conflict over the situation. Alternatively, participants who fully obeyed the inappropriate instructions to pad the budget appeared to shift responsibility for the decision to their pressuring superior, perhaps explaining the relatively low level of conflict. For participants who refused to alter their initial recommendation, the relatively low level of conflict can be explained by perceptions that they did “the right thing.” These participants justified their decision by stating that they complied with corporate policy, that budget padding is wrong, and that their initial estimate was accurate.

Interestingly, despite the inherent risk and findings of self-presentation effects in prior ethics studies (e.g., Cohen et al. 1993; Lord and DeZoort 2001), our results do not provide evidence that the participants under obedience pressure considered themselves less likely to violate explicit policy than their peers. Participants who refused to modify their initial recommendation in the face of obedience pressure indicated that a majority of their peers

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\textsuperscript{18} We also compared the responses of participants who reported they had been in a similar situation with participants who reported they had not been in a similar situation. The budget recommendations were not significantly different ($p = 0.48$) between groups. However, we did find that participants who had experienced a similar situation thought a significantly higher percentage of their peers (69 percent) would obey the order to violate policy than did participants who had not experienced a similar situation (51 percent; $p = 0.03$).
would do the same thing. Similarly, participants who obeyed the order to create budget slack indicated that a majority of their peers would do the same thing. These findings suggest that participants tended to consider their responses to be consistent with what others would do.

Several limitations deserve consideration when evaluating this study’s results. First, the study’s artificial pressure treatment likely differs from real-world obedience pressures. We believe the study provides a conservative measure of obedience pressure effects because real-world pressure with accountability should be more salient than experimental pressure. However, we also recognize that alternative incentives (e.g., knowledge of ex post review of budgeted spending variances) in complex real-world settings may offset pressure effects. Second, the study’s generalizability is limited to the extent we evaluated slack creation in a setting where an explicit corporate budget policy was given. Despite evidence of task realism and familiarity, responses to pressure and attitudes toward slack creation may differ in the absence of recently announced budget policy or in the presence of information about other colleagues’ responses to similar pressure. In addition, to the extent that we asked participants to assume the role of new managers, future research should evaluate whether experienced managers may respond differently to obedience pressure than newer managers because of concerns about reputation, promotion, or job security. Finally, while we use obedience and attribution theory to predict that individuals will rationalize obedience ex ante by deflecting responsibility for their actions, we cannot establish causality or specify the extent that responsibility shifting mediates the pressure-outcome relation. Future research should continue to use alternative methods (e.g., mediation models) to evaluate factors that mediate and moderate obedience pressure effects.

APPENDIX
Experimental Task
SimGuard Manufacturing, Inc.

Background

Please assume you are in your first year as Manager of Accounting Services for the MythGuard Division of SimGuard Manufacturing, Inc. (SGM). SGM manufactures products that safeguard materials such as wood, plastics, fabrics, painted metal from wear and tear associated with exposure during inclement weather.

SGM is divided into four divisions and has the following centralized organizational structure:
You report directly to the CFO, who completes your performance evaluations and determines your annual raises and promotions. Your current responsibilities are to provide ad hoc reporting, analyses, and budget recommendations. In addition, you are responsible for enforcing company-wide fiscal policies at the division level.

**Budgeting Responsibilities**

In the budgeting area, your duties involve submitting a recommendation for a single budget amount for the division’s overhead spending. Your recommendation is important because it is the first component of a budgeting paper trail that is subject to review by auditors and top executives within the organization. After receiving all department heads’ spending estimates for 2002, you calculate that controllable overhead spending for the division in 2002 will be $4,500,000.

Typically, a 10 percent cushion has been added to each budget estimate to ensure actual spending levels do not exceed budgeted amounts. Meeting budgeted spending goals is considered important for two reasons. First, annual bonuses for all hourly division employees are determined based on actual versus budgeted spending. Second, the division has never exceeded budgeted spending limits. Historically, your division has consistently met its budgeted spending goal (see Exhibit 1).

**The Current Situation**

Just after the start of this year’s budgeting process, the company’s CEO called a teleconference to discuss a new budget policy. During the teleconference, the CEO discussed a newly issued memorandum stating that, because of a recent downturn in the economy, spending budgets for divisional overhead should be set as accurately as possible. Specifically, the CEO stated that budgeted spending levels should represent “challenging but attainable goals.”

At the end of the meeting, SGM’s CFO pulls you aside and says:

I want you to change your $4.5 million recommendation to be as high as last year’s budget amount of $4.9 million. Budgeting anything less than last year’s budget would greatly increase the chance of us coming in over budget, putting the hourly workers’ bonus in jeopardy and reflecting poorly on the entire division’s management team. This conversation needs to stay between you and me and I will remember this later.

Based on the information presented and the fact that you report directly to the CFO, what overhead spending budget amount would you recommend for 2002?

$ ______________________

Please list at least two primary reasons (in order of importance) for your budget recommendation.

__________________________________________________________________________________________
### EXHIBIT 1

#### Actual versus Budgeted Spending

<table>
<thead>
<tr>
<th>Year</th>
<th>Budgeted Overhead Spending</th>
<th>Actual Overhead Spending</th>
<th>% under (over) budget(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>4,725,125</td>
<td>4,251,431</td>
<td>10.03%</td>
</tr>
<tr>
<td>1999</td>
<td>4,785,655</td>
<td>4,326,528</td>
<td>9.59%</td>
</tr>
<tr>
<td>2000</td>
<td>4,855,110</td>
<td>4,363,778</td>
<td>10.12%</td>
</tr>
<tr>
<td>2001</td>
<td>4,905,025</td>
<td>4,424,656</td>
<td>9.79%</td>
</tr>
</tbody>
</table>

\(^a\)The goal is to be under budget by spending less than the budgeted overhead spending amount.

### REFERENCES


*Behavioral Research in Accounting, 2006*


