The Relationships Between Senior Auditor Budget Participation, Job Structuring, Job Consideration And Staff Auditor Time Budget Pressure

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Abstract

This study employs a two-person model to examine relationships between senior auditor behaviors and staff auditor time budget pressure (TBP). Specifically, the study examined the relationships between staff auditor TBP and (1) senior participation in the audit budgeting process, (2) senior structuring of staff auditor's job tasks, and (3) senior consideration of staff auditors. Senior auditor subjects were asked to indicate the extent of their audit budget participation on a specific audit while the staff auditor subjects were asked to respond to questions indicating the extent of senior job structuring and consideration on that same audit. Both senior and staff auditors were asked to indicate their perceptions of the staff auditor TBP on the specified audit. Surprisingly, the results showed no correlation between senior and staff auditors' perceptions of the extent of the TBP faced by the staff auditors on the specified audits. Specifically, greater senior budgetary participation was associated with higher staff auditor TBP perceptions (i.e., positive association) while, on the other hand, senior auditors perceived staff auditors as having less TBP when there was greater senior budgetary participation (i.e., negative association). Finally, less senior job structuring of the staff auditor's job tasks was found to be associated with greater staff auditor TBP (i.e., negative association) while only mixed evidence of an association between senior auditor consideration and staff auditor TBP was found.

Introduction

ime budget pressure (TBP) within the auditing profession has been linked to undesirable consequences such as reduced audit quality and underreporting of chargeable time [e.g., Lightner, Adams and Lightner, 1982; Kelley and Margheim, 1990; Malone and Roberts, 1996; Otley and Pierce, 1996]. Therefore, continued research examining TBP issues is important to the profession.

While prior research has related external audit fee pressures [e.g., Palmrose, 1989] and the ambiguous nature of many audit tasks [Guess et al. 2000] to subsequent pressures to complete audits in less time, this study concentrates on factors within individual audit teams that may be related to TBP. Specifically, relationships between behaviors of supervising senior auditors and the TBP experienced by their subordinate staff auditors are examined.

Prior research in a public accounting setting [Pratt and Jiambalvo, 1981] and industrial settings [e.g., De-Coster and Fertakis, 1968] suggest that the following senior behaviors may be associated with the TBP experienced by staff auditors:

Readers with comments or questions are encouraged to contact the authors via email.

(1) senior participation in the audit time budgeting process,

- senior job structuring (i.e., the degree to which the supervisor structures or defines the patterns of organization and job tasks of subordinates [Stogdill and Coons, 1957]),
- (3) senior consideration for staff auditors (i.e., behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between supervisors and subordinates [Stogdill and Coons, 1957]).

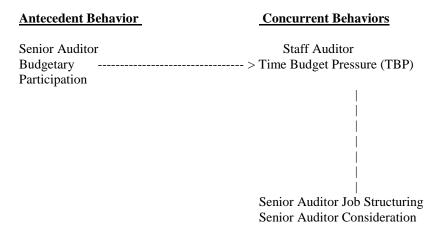
This study extends prior research in several ways. First, the study utilizes a two-person model to examine relationships between senior behaviors and staff auditor TBP. Second, the study examines the relationship between senior participation in audit budget preparation and staff auditor TBP. Finally, the study extends the prior research examining the effects of senior auditor leadership style (i.e., job structuring and consideration) on staff auditors.

The remainder of this paper is divided into the following sections: theoretical model and background, hypotheses, method, results, summary, and suggestions for future research.

Theoretical Model & Background

A two-person model relating the senior auditor behaviors and staff auditors' TBP is shown in Figure 1. The model identifies senior participation in the audit budgeting process as an antecedent variable to staff auditor TBP. Prior research [e.g., Brownell and McInnes, 1986; Kren, 1992; and Nouri and Parker, 1996] has shown that budgetary participation affects the participating individual's own resulting behaviors. Extending those results to a two-person framework suggests that a superior's participation in the budgetary process could also affect subordinate behaviors. Budgetary participation is shown as an antecedent variable because the budget is usually prepared prior to the start of staff auditor work.

Figure 1 Senior Auditor Behaviors - Staff Auditor Time Budget Pressure Model



The model in Figure 1 shows senior auditor job structuring and senior auditor consideration as occurring concurrently with staff auditor TBP. These behaviors were included in the model because they were identified by the Ohio State University Leadership Studies [e.g., Stogdill and Coons, 1957] as being the two basic dimensions of leader behavior and, as discussed below in the hypotheses section, have received extensive attention in prior research.

Since senior leadership behaviors and staff auditor TBP occur concurrently and are quite likely to have a mutual influence on each other, the model does not hypothesize any cause-effect direction between the variables. On one hand, DeCoster and Fertakis [1968] suggested that perceived changes in budgetary pressure leads to changes in leadership style. In essence, this suggests that seniors will gauge the TBP on an audit and will alter their leader-

ship behaviors based on the amount of pressure. However, the opposite could also occur -- changes in the leadership style of supervisors could lead to changes in the staff auditors' perceived budgetary pressure.

The current study only examines whether relationships between the leadership variables and TBP exist and does not address the cause-effect directional issue. As discussed in the method section below, we conducted a survey of senior and staff auditors concerning their behavior on an audit they had completed together. Testing for cause-effect relationships will require experimental designs to be used in future research.

Hypotheses

Senior Budgetary Participation/Staff TBP

Prior auditing literature has not examined the relationship between supervisory budgetary participation and the budgetary pressures experienced by nonparticipating subordinate auditors. Instead, prior research has focused on the impact of budgetary participation on the motivation, job satisfaction, and job performance of the supervisor participating in the budgetary process, as well as on the willingness and ability of the supervisor to create budgetary slack.

The prior research has fairly consistently shown a positive association between budgetary participation and the motivation, job satisfaction, and job performance of the supervisor participating in the budgetary process [e.g., Brownell and McInnes, 1986; and Kren, 1992]. Given the generally positive outcomes for supervisors who participate in the establishment of the budget, we expected that the subordinates working under the participating supervisor would also experience a more favorable situation than subordinates working under nonparticipating supervisors. Therefore, the following hypothesis was tested:

H1: Higher levels of senior participation in establishing audit time budgets are related to lower staff auditor TBP (i.e., negative correlation).

Senior Job Structuring and Consideration/Staff TBP

Prior accounting research has concentrated on the direct relationships between supervisory job structuring and consideration behaviors and outcome variables such as staff auditor satisfaction, motivation, performance, and engaging in dysfunctional behaviors [e.g., Jiambalvo and Pratt, 1982; Kelley and Margheim, 1990; and Apostolou, Pasewark, and Strawser, 1993]. However, little accounting research has examined the relationships between supervisory leadership behaviors and subordinate time budget pressures.

Revsine [1970] developed a model suggesting the existence of inverted-U relationships between budgetary pressure and the leadership behaviors job structuring and consideration. Specifically, Revsine's model theorized that at lower levels of budgetary pressure, supervisors respond to increased budgetary pressure by increasing their job structuring and consideration behaviors (i.e., positive correlations). However, increased budgetary pressure past a certain point would overwhelm supervisors and they would respond to additional increases in budgetary pressure by decreasing their job structuring and consideration behaviors (i.e., negative correlations). Prior research in accounting has shown evidence of an inverted-U relationship between pressures on auditors and job performance (e.g., Choo 1986).

Audit related research provides evidence that TBP in public accounting remains quite high [e.g., Margheim and Kelley, 1992; Malone and Roberts, 1996]. Therefore, consistent with Revsine's inverted-U theory at higher levels of TBP, we expect to find negative correlations between TBP and senior job structuring and consideration. Specifically, the following hypotheses were tested:

- H2: Decreasing levels of senior job structuring are associated with increasing levels of TBP on staff auditors (i.e., negative correlation).
- H3: Decreasing levels of senior consideration to the staff auditors are associated with increasing levels of TBP

on staff auditors (i.e., negative correlation).

Method

To examine the relationships noted above, a survey of audit seniors and staff was conducted. Questionnaires were mailed to senior and staff auditors who had worked together on a specific audit. Subjects were asked to respond to questions relating to TBP, the level of senior participation in the budgeting process, senior job structuring, and senior consideration on the specified audit.

Sample

A total of three offices from international CPA firms participated in the study. Each participating office prepared a list of all audits conducted by that office over a three-month period. From these lists pairs of seniors and staff who worked on the same audit were selected, subject to the limitation that no more than one questionnaire be sent to any of the potential participants. Thus, some of the potential senior/staff auditor matched pairs were eliminated. Data was received resulting in 85 usable matched pairs of senior/staff auditors, representing approximately 55% of the matched pairs receiving questionnaires.

Questionnaire

One questionnaire was designed for the seniors and another for the staff. Seniors were asked two items on their questionnaire:

- 1) the extent of TBP experienced by the staff auditor(s) on the specified audit, and
- 2) the extent of the senior's participation in the budgetary process on the specified audit.

As shown in Table 1, seniors were asked to estimate the staff's TBP on the specified audit by selecting from five responses ranging from "the time budget was very easy to attain" to "the time budget was impossible to attain." As shown in Table 2, seniors were also asked to select from five potential budget participation categories ranging from "I generated the first draft of the time budget" to "the same time budget as last year was used."

Staff auditors were asked three items on their questionnaire:

- 1) one question used to measure the TBP the staff auditor encountered on the specified audit,
- 2) ten questions used to measure the extent of the senior's job structuring behavior, and
- 3) ten questions used to measure the extent of the senior's consideration behavior.

Staff auditors were asked to assess their TBP using the same five potential response categories used by the senior auditors [see Table 1]. Both sets of questions related to job structuring and consideration were adapted from the Leadership Behavior Description Questionnaire (LBDQ) [Stogdill, 1963], as modified for an auditing environment by Pratt and Jiambalvo [1981]. As performed in those studies, the individual responses were summed to provide scores for senior job structuring and consideration. Scores could range from 10 to 50.

Results

Consensus of TBP Perceptions

Senior behaviors, like job structuring and consideration, are likely to be based in part on seniors' perceptions of their staff auditors' TBP. Therefore, it was important to measure the seniors' perceptions of staff TBP, as well as staff auditors' perceptions of their own TBP. Seniors usually supervise and work closely with staff auditors in the field. Therefore, it was expected that there would be a high degree of consensus (i.e., high positive correlation) between senior and staff auditor perceptions of staff TBP.

The TBP perceptions of senior and staff auditors are summarized in Table 1. Interestingly, Table 1 does

not suggest that staff auditors usually see themselves under more TBP than their seniors perceive. Specifically, a total of 37% of the staff auditors perceived the budget to the very easy to attain or attainable with reasonable effort while only 22% of the seniors were in those categories. On the other hand, a total of 18% of the staff auditors perceived the budget to be very tight, practically unattainable or impossible to attain versus only 9% of the seniors.

While the summary descriptive statistics in Table 1 indicate the TBP frequencies for senior and staff auditors, the table does not reflect any "matching" of senior and staff auditor responses. Therefore, correlation analysis was used to assess the degree of consensus between the individual seniors and their staff as to their perceptions of staff auditor TBP.

Surprisingly, the results indicated almost no correlation (r = +.04; p = .348) between the TBP perceptions of the seniors and their staff. Therefore, there was little consensus between individual staff auditors and their supervising seniors as to the extent of TBP experienced by the staff auditors on the specified audits.

Table 1 Senior and Staff Auditor Perceptions of the Extent of Staff Auditor Time Budget Pressures on Specified Audits

Perceptions of Staff Auditor Time Budget Pressure:	Senior Auditor Perceptions (n=85)	Staff Auditor Perceptions (n= 85)
Time Budget was perceived as:		
1. Very easy to attain	0%	8%
2. Attainable with reasonable effort	22	29
3. Attainable with considerable effort	6	45
4. Very tight, practically unattainable	4	11
5. Impossible to achieve	<u>5</u>	<u>7</u>
	<u>100%</u>	<u>100%</u>

Hypothesis Test Results

Descriptive data in Table 2 indicate that the majority (65%) of seniors in this study actively participated in the preparation of the audit time budget. In addition, the overall mean senior job structuring score was 39.5 and the overall mean senior consideration score was 38.3, both out of a 10 to 50 point range, indicating that the staff auditors perceived their seniors as exhibiting relatively high levels of job structuring and consideration behaviors. The study's hypotheses were tested using both correlation and regression analysis as discussed below.

Table 2
Senior Budgetary Participation on Specified Audits

Senior Perception of Budgetary Participation:	Senior Response (n= 85)
I generated the first draft of the time budget. The manager and partner had final approval.	65%
I reviewed the manager's (or partner's) draft of the time budget before it was finalized.	2
I was consulted on some budget items by the manager or partner before the budget was handed down.	2
The time budget was handed down to me without my being consulted.	29
The same time budget as last year was used without any discussion with the manager or partner regarding the appropriateness of the time budget.	<u>2</u>
	100%

To initially examine H1, senior participation in the budgetary process was correlated with staff TBP. Correlations were performed using both the staff and senior perceptions of staff TBP since, as noted above, the perceptions of the seniors and their staff were not correlated.

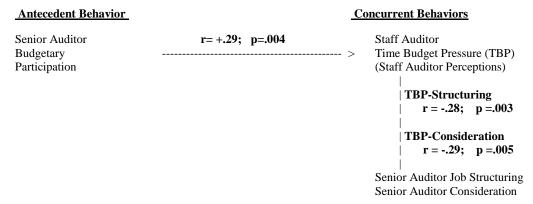
Contrary to H1, the results using the staff auditors' perceptions of their TBP indicated that staff auditors felt

more TBP when their senior participated in the budgeting process (r = +.29; p = .004). However, the results using the senior auditors perceptions of staff TBP are almost exactly the opposite--seniors perceived less staff auditor TBP when they (seniors) participated in the budgeting process (r = -.23; p = .023). The results are summarized in Table 3.

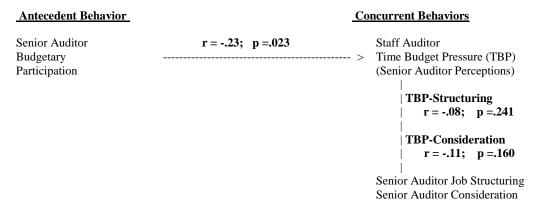
To initially examine H2 and H3, senior and staff auditor perceptions of staff TBP were correlated with the staff auditors' perceptions of senior job structuring and consideration, respectively. As shown in Table 3, when the staff auditors' perceptions of their TBP were used the results indicate significant negative correlations between TBP and both the level of senior job structuring (r = -.28; p = .003) and consideration (r = -.29; p = .005). Thus, H2 and H3 are supported by these correlations. However, utilizing senior auditor perceptions of staff auditor TBP produced results that were consistent in showing negative correlations between TBP and both senior job structuring (r = -.08; p = .241) and consideration (r = -.11; p = .160), but were nonsignificant.

Table 3 Correlations Between Senior Auditor Behaviors and Staff Auditor Time Budget Pressure

Panel A: Correlations Utilizing the Staff Auditors' Perceptions of their Time Budget Pressure.



Panel B: Correlations Utilizing the Senior Auditors' Perceptions of Staff Time Budget Pressure.



Two regressions were also performed to examine the impact of senior budgetary participation, job structuring, and consideration simultaneously on staff auditor TBP. Similar to the correlation analysis, one regression utilized the staff auditors' perceptions of TBP while the other utilized the senior auditors' perceptions of the staffs' TBP. The results of the two regression analyses are shown in Table 4 and are generally consistent with the individual correlations shown above.

Regression Analyses of Senior Behaviors on Staff Auditor TBP

Panel A: Regression Utilizing the Staff Auditors' Perceptions of their Time Budget Pressure as the Dependent Variable.

	Beta	t	р
Intercept	5.84		_
Senior Budget Participation	+ .28	+2.76	.007
Senior Job Structuring	24	-1.99	.050
Senior Consideration	18	-1.48	.143
Model $R^2 = .22$		F = 7.16	.001

Panel B: Regression Utilizing the Senior Auditors' Perceptions of Staff Auditor Time Budget Pressure as the Dependent Variable.

	Beta	t	р
Intercept	3.10		_
Senior Budget Participation	23	-2.03	.046
Senior Job Structuring	+ .01	+ .10	.925
Senior Consideration	13	92	.361
Model $R^2 = .06$		F = 1.60	.196

The first regression utilizing the staff auditors' perceptions of their TBP as the dependent variable shows a highly significant regression model (F = 7.16; p = .001). However, only the senior budgetary participation (t = +2.76; p = .007) and senior job structuring (t = -1.99; p = .05) variables were significant, with the same directional trends as noted with the simple correlations. However, the senior consideration variable was not significant (t = -1.48; p = .143). These results add support to the conclusion that staff auditors perceive their TBP as increasing when seniors participated in preparing the budget and that there is a negative relationship between staff auditors' perceptions of their own TBP and their seniors' job structuring behavior.

The second regression analysis was performed using the senior auditors' perceptions of staff TBP as the dependent variable. The results, shown in Table 4, are again fairly consistent with the related simple correlations. In particular, only the senior budgetary participation variable was significant (t = -2.03; p = .046).

Summary

This study examined relationships between behaviors of audit seniors and staff auditor TBP. Survey responses from seniors and staff auditors from three offices of large international accounting firms regarding TBP and supervisory behaviors on a specified audit indicated the following:

- 1. There was no correlation between senior and staff auditors' perceptions of the extent of the TBP faced by the staff auditors on the specified audits examined.
- 2. There was a positive relationship between staff auditor perceptions of their own TBP and senior auditor budgetary participation (i.e., more senior budgetary participation was associated with greater staff auditor perceptions of their own TBP). On the other hand, there was a negative relationship between senior auditor perceptions of staff TBP and senior auditor budgetary participation (i.e., more senior budgetary participation was associated with senior auditors perceiving staff auditors as having less TBP).
- 3. There was a negative relationship between staff auditor perceptions of their own TBP and the job structuring behavior of senior auditors (i.e., less senior job structuring was associated with greater staff auditor perceptions of their own TBP). However, the association between the senior auditor perceptions of staff TBP and senior job structuring was not statistically significant.

Limited support was found for a negative relationship between staff auditor TBP and senior auditor consideration of the staff auditor.

The overall lack of correlation between senior and staff auditor perceptions of the TBP experienced by staff auditors is surprising. Senior auditors work closely with the staff auditors they supervise, therefore a high degree of consensus was expected. This result either suggests a lack of communication or a fundamental disagreement between staff auditors and seniors regarding the amount of TBP that the staff auditors are experiencing.

The results also suggest that staff auditors perceived more TBP when their seniors participated in the audit budget preparation. However, the seniors tended to believe that the staff auditors experienced less TBP on audits in which they (as the senior on the audit) participated in the budget preparation. Since prior research by Marxen (1990) has provided evidence that audit time budgets prepared by seniors are tighter that those prepared by managers and partners, it is possible that senior participation in the budgetary process may co-opt seniors into perceiving their staff as being under less time budget pressure than is actually the case.

The results suggest that audit firms should carefully consider the links between senior auditor behaviors and staff auditor TBP. For example, firms should consider training seniors to use leadership behaviors (e.g., job structuring and consideration) that may help to reduce staff TBP. In addition, audit seniors might be trained in ways to best communicate with their staff auditors about TBP or ways in which to observe their staff for signs of excessive TBP.

Suggestions For Future Research

Future research should examine the cause-effect direction between senior auditor leadership behaviors and staff TBP. A lab experiment could help to clarify whether senior leadership behavior leads to changes in staff auditor TBP or whether perceived TBP leads seniors to change their leadership behavior.

In addition, future research should examine the effects of a more comprehensive set of leadership behaviors on staff TBP. For example, Van Fleet and Yukl [1986] and Apostolou, Pasewark and Strawser [1993] have brokenout the two basic dimensions of leader behavior (i.e., job structuring and consideration) into a comprehensive taxonomy of 23 very specific leader behaviors which could be used in a more detailed examination of the relationships between senior leadership behaviors and staff TBP.

Finally, future research should reexamine the relationship between senior budgetary participation and staff TBP. Such research should attempt to determine the underlying reasons why staff auditors perceive more TBP on audits where the seniors participated in preparing the audit budget, while the seniors perceived that the staff had less TBP on those audits.

In summary, leadership behaviors used by supervisory personnel are critical to the performance of high quality audits. CPA firms need to pay special attention to senior behaviors associated with changes in staff auditor TBP, since prior research has related excess TBP to reductions in audit quality. These CPA firms must make considerable efforts to ensure that leadership skills are being used properly by their supervisory personnel.

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