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Underreporting Of Chargeable Time: The Impact Of Gender And Characteristics Of Underreporters

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While prior research has examined the dysfunctional effects of time pressure and the underreporting of chargeable hours (e.g., Rhode, 1978; Lightner *et al.*, 1982; McDaniel, 1990; Ponemon, 1992, Akers and Eaton, 1999), the purpose of this study is to expand the literature on underreporting chargeable hours. We contribute to the existing literature in two specific ways. First, the impact of gender is examined. Prior research has not examined this issue. Second, a discriminant model, which has never been used before, is used to compare characteristics of those individuals who underreport time with those individuals who do not. Based on the responses of over two hundred practicing accountants we find significant differences between males and females in their perceptions regarding the underreporting of time. Utilizing variables from prior research, we test a model to predict the propensity to underreport time. While the model was statistically significant, it did not predict underreporting any better than chance. This finding suggests that additional research is needed in this area to identify other factors that could be important in explaining an individual's propensity to underreport time.

The first section of the paper provides a literature review and the resulting hypotheses. Specifically, research related to time pressure, gender and characteristics or factors that could lead to underreporting are examined. Next, we examined the research methodology and then present and discuss the results. Concluding comments and limitations of the study are presented in the final section.

REVIEW OF PRIOR LITERATURE

Time Pressure

Time pressure is present when the information-processing demands of a decision exceed a decision-maker's information-processing capabilities (Newell and Simon, 1972). Auditors are subjected to substantial time pressure in audit and tax engagements. Such time pressures often impact accountants' behaviors. Budgeted time on an audit/tax engagement is often influenced by the actual time spent during the previous engagement. When accountants underreport time on a current engagement, the amount of time budgeted on that same engagement in the future might not be adequate. If during the future engagement, an accountant feels pressured to perform the task in the budgeted time, he/she will do one of three things: (1) perform the necessary work and report the actual time, thus going over budget and face the consequences, (2) perform the necessary work but not report the actual time, thus underreporting again, or (3) not perform the necessary work but claim he/she did (i.e., a premature sign-off).

There is evidence in the accounting literature that the underreporting of chargeable time is an issue that the profession has struggled with for the past twenty years. Lightner *et al.* (1983) found that 67% of the accountants responding to their survey admitted to underreporting time. More recent studies show that underreporting continues within public accounting firms. Kelley and Margheim (1990) surveyed staff auditors from a national firm. Their results showed an inverted-U shaped relationship between pressure and underreporting. Ponemon (1992) found that subjects participating in his experiment underreported time an average of more than 12 percent. Smith *et al.* (1996) found that 89% of the CPA respondents did not report all of their chargeable time while Akers and Eaton (1999) found that 71% of their respondents did not report all chargeable time.

As noted above, one of the possible dysfunctional effects of time pressure is substandard audits or tax returns/planning. Research over the past twenty years illustrates this fact. In 1978 the Cohen Commission reported that time pressure was the most significant cause of substandard audits. Rhode's 1978 survey, commissioned by the American Institute of Certified Public Accountants' (AICPA) to examine the auditing work environment, found over one-half of AICPA members questioned admitted to prematurely signing off on audit procedures due to time pressure. Alderman and Dietrick (1982) found results consistent with the AICPA study: 31% of audit seniors admitted to premature sign-offs. Kermis and Mahapatra (1985) conducted an experiment with seniors and managers from Big-Eight firms and found that as time pressure increased, auditors decreased their assessment of the amount of time necessary to complete the audit. McDaniel (1990) found that increasing time pressure resulted in decreased audit effectiveness but increased audit efficiency. Subjects performed more work in the same interval of time but the work performed was of lesser quality. Azad (1994) surveyed internal auditors and found the respondents felt time budgets were tightening, which impacted the conduct of a proper audit. Houston (1999) used audit seniors from four of the Big-Six firms to examine the joint effects of audit fee pressure and client risk on audit planning decisions. One of his findings showed that seniors expected to work more than budgeted hours when client risk increased.

A major problem in addressing underreporting behavior is the inconsistency between formal external policies and informal internal policies. Although individual firms and the accounting profession in general prohibit the underreporting of time, research has shown that penalties are not actually exercised when such behavior occurs (Ponemon, 1992).

Gender

Thirty years ago accounting was primarily a male dominated profession. However, over the last twenty years, particularly in the last decade females have gradually increased their numbers. Approximately one-half of new professionals currently entering the accounting profession with public accounting firms are female (Doucet and Hooks, 1999). Unfortunately, these numbers do not extend to the highest levels of the profession. Doucet and Hooks (1999) report on a recent survey of accountants, which shows that while staff level accountants are approximately 50% female, the numbers at upper ranks were far less. Doucet and Hooks report that only 32% of senior managers and 19% of new partners are female. Similarly, Krugman (2000) reports that only 17% of females are partners. This evidence suggests that although initial entry has been gained, retention and advancement appears to remain a problem (*Business Week*, 1997; Doucet and Hooks 1999). Some firms however are attempting to address the problem. In 1992, Deloitte and Touche established a Task Force on the Retention and Advancement of women to attempt to help identify the determinants of the gender problem. This work is having an impact. Recently, the firm was in the top ten of Fortune magazine's best companies to work for and has substantially cut turnover (Krugman, 2000). Arthur Andersen, Ernst & Young, Pricewaterhouse-Coopers, and KPMG have all implemented programs aimed at retaining women as well.

One potential source of bias found against women is in the area of performance evaluation. Women, in general, receive lower performance evaluations than men (Igbaria and Baroudi, 1995). Research also suggests that females receive lower performance evaluations than their actual performance dictates (Heilman, 1983; Kraiger and Ford, 1985). The results of such prior research are also applicable to the accounting profession. Picolli *et al.* (1988) state that women accountants may be particularly vulnerable to time-pressure stress due to the additional time demands outside of work. A recent survey by Catalyst reports that billable hours is also a significant problem facing women accountants today (Krugman, 2000). The implication from such research is that women might be more likely to underreport chargeable time since performance evaluations in the accounting profession can be influenced by one's ability to perform his/her job within budgeted time constraints.

Previous research has not focused on gender differences in the underreporting of time. Other gender research has found that females are more concerned about ethical issues than males (Akaah, 1989; Beltramini *et al.*, 1984; Jones and Gautschi, 1988; Peterson *et al.*, 1991). Additionally, recent studies in accounting have found evidence of gender differences in the areas of ethics and personal values. Sweeney (1995) found that women auditors displayed significantly higher moral development than did male auditors. Cohen *et al.* (1998) found evidence that females viewed questionable scenarios as being less ethical than did males. Examining personal values, Eaton and Giacomino (2000) recently found significant differences between genders. They found that female students were more moral focused in their means to attain social (corporate) goals compared to males who were more competence oriented in their means to obtain personal goals. A follow up study by Eaton and Giacomino (2001) compared students to managers. They found that work experience had very little impact on males but did significantly affect females, causing them to move more towards using competence rather than moral means to obtain social goals. Other gender research has examined the differences in values and value types of accounting and other business majors (Giacomino and Akers, 1998), Big-Eight accountants (Akers and Giacomino, 2000) and certified internal auditors (Akers and Giacomino, 1999). The findings show that while there are significant differences, there are more similarities than differences. Additionally, Akaah (1989) found that female marketing professionals made higher ethical decisions than males. Fagenson compared the value systems of female and male entrepreneurs and managers, and found that while "entrepreneurs and managers had vastly different value systems . . . individuals' gender had very little difference on their value systems" (1993: 409). Since the underreporting of chargeable time is considered unethical by accounting firms, the gender research regarding **personal values/value types and ethical decisions** suggests that women are less likely to underreport chargeable time. Since the implications from the performance evaluation and personal values/ethical decisions are contradictory regarding the likelihood of women underreporting chargeable time, we propose the following hypotheses:

H1: No significant differences in the underreporting of chargeable time will exist between male accountants and female accountants.

H2: No significant differences in perceptions of underreporting chargeable time will exist between male accountants and female accountants.

Characteristics That May Distinguish Those That Underreport Time

Because some accountants will underreport time, the auditing literature offers several suggestions as to how public accounting firms can alter such behavior. Limited research (Lightner *et al.*, 1982), however, has been conducted regarding the factors that lead to underreporting time. Public accounting firms could do a better job of deterring such behavior if the firms had a better understanding of the characteristics of the individuals most likely to not report all chargeable hours. Lightner *et al.* (1982) examined the relationship between the percentage of unrecorded time and antecedents of underreporting time and found the three variables exhibiting the most explanatory power as antecedents of underreporting time were: (1) feasibility of meeting budget (2) individual approval (personal belief regarding such behavior), and (3) supervisors' request. These findings are consistent with prior behavioral research in other areas. For example, the social psychology literature (Brehm and Kassin, 1990) discusses three types of social influence pressures—compliance, conformity and obedience. To some extent all three types of pressure are evident when a supervisor asks a subordinate to underreport time in order to meet a budget. These pressures can create stress that affects the behavior of the individual. The organizational stress literature (Bhagat *et al.*, 1995; Havlovic and Keenan, 1995) identifies and evaluates coping strategies used by professionals to deal with pressures including time pressure. The importance of examining characteristics that can impact an individual's response to pressure is also found in the organizational stress literature. Sutherland and Cooper note that "psychological, physiological and/or behavioral responses to stress are products of the situation and patterns based on attitudes, needs, values, past experience, life circumstances, and ability (i.e., intelligence, education, training, learning)"(1988: 24). To determine if there are characteristics that distinguish those that underreport time from those that do not, the following hypothesis is tested:

H3: **There are no statistically significant variables that distinguish those that underreport time from those that do not.**

RESEARCH METHODOLOGY

We used a survey research methodology of the population of the Wisconsin Institute of Certified Public Accountants (WICPA) in public practice. We mailed an introductory letter soliciting participation, the research instrument, and a pre-addressed, postage-paid return envelope to 500 randomly selected individuals from the entire WICPA. A total of 224 responses were returned for a 44.4 percent response rate. The high response rate implies there is strong interest in this issue by professional accountants.

The research instrument (Appendix A) solicited information on demographic variables, perceptual questions related to the underreporting of chargeable time (questions 1-4), the percentage of unreported chargeable from the prior year (question 5) and perceptual questions regarding the likelihood that underreporting leads to rewards (questions on page 2). The demographic variables are gender, work experience (in years), service area (audit, tax, other) and position (staff, seniors, managers, partners). Demographic information about the respondents is presented in Table 1. The sample is 67 percent male, with an average of thirteen years of work experience for the total sample. Seven percent of the respondents hold staff positions, whereas 24 percent are seniors, 31 percent are managers, and 38 percent are partners. The variables and their respective definitions are shown in Table 2.

RESULTS

H1 and H2: Tests of Underreporting by Gender

Hypothesis 1 (H1) stated that statistically significant differences would not be found in the underreporting of chargeable time between male and female accountants. While females disclosed

TABLE 1
Subject Demographics

GENDER	67% MALE
MEAN WORK EXPERIENCE	13 YEARS
SERVICE AREA	45% AUDIT, 40% TAX, 15% OTHER
ORGANIZATIONAL LEVEL	7% STAFF, 24% SENIORS, 31% MANAGERS, 38% PARTNERS

underreporting a greater percentage (5.68 %) of their total chargeable time than males (4.71 %), the differential was not statistically significant. Although we do not find sufficient evidence to reject H1, the findings of the study are consistent with the inferences from the **performance evaluation research** that women might be more inclined to "eat" time.

Hypothesis 2 (H2) stated that statistically significant differences would not exist in the perceptions of underreporting chargeable time between male and female accountants. Table 3 summarizes the results of t-tests between genders. Note that several highly significant differences exist. At the .01 level of significance (using two-tailed tests), we found that females perceived a lower ability to meet budget than males (.003) and they were more likely to receive implicit requests to "eat" time (.002). Females were also more likely than males to perceive underreporting as leading to better periodic performance evaluations (.000), competency (.000), promotion and advancement (.000), and feelings of pride (.007). Finally, females were more likely than males to perceive that underreporting time would lead to better assignments of jobs that are more challenging and interesting (.035). The above provides sufficient evidence to reject H2.

These findings indicate that the women respondents believe that "eating" time will lead to better evaluations and promotions, which is consistent with the performance evaluation research. It is also interesting to note that the women respondents believe the underreporting of chargeable time enhances competency, which is consistent with some of the personal values research (Eaton and Giacomino, 2001). We suggest that the finding that women were more likely to receive implicit requests to "eat" time stems from the fact that the majority of management of public accounting firms (men) view power as more important, which is consistent with the values research (Akers and Giacomino, 1999; Giacomino and Akers, 1998), yet they are probably reluctant to be explicit in this request.

TABLE 2
Variable Definitions

Variable	Definition
SUCCESS	Perceived ability to underreport time successfully
MEET	Perceived ability to meet budget by reporting 100% of chargeable time
PERCEPTION	Perception that underreporting time is ethical
EXPLICIT	Frequency of explicit requests by superior to underreport time
IMPLICIT	Frequency of implicit requests by superior to underreport time
EVAL	Perception that underreporting leads to better periodic performance evaluations
SUPER	Perception that underreporting will lead superiors to think subject is competent or more competent than others at the same level
FEELING	Perception that underreporting leads subject to feeling more secure about his/her position with the firm
PROMO	Perception that underreporting leads to promotion and advancement
ASSIGN	Perception that underreporting will lead to more interesting and challenging job assignments
PRIDE	Perception that underreporting leads to pride in meeting time budgets
GROWTH	Perception that underreporting contributes to personal growth and development
COMPETE	Perception that underreporting contributes to feeling as competent as others at a similar level
ACCOMP	Perception that underreporting contributes to accomplishing something worthwhile
JOBSAT	Perception that underreporting leads to job satisfaction
BETTER	Perception that underreporting leads to feeling better about oneself

H3: Test of Characteristics That Distinguish Those That Underreport from Those That Do Not

Multiple Discriminant Analysis (MDA) was used to classify the accountants that underreport (> 0%) time from those that do not (0%) using the variables previously discussed. The three objectives of MDA are: 1) determining if statistically significant differences exist between the average score profiles of the two (or more) *a*

TABLE 3
T-Tests of Perceptions of Underreporting by Gender

Variable	Male	Female	t-value	2-tailed p-value
SUCCESS	2.05	2.26	-1.49	.138
MEET	3.58	3.17	3.04	.003***
PERCEPTION	3.85	3.72	1.06	.291
EXPLICIT	2.92	2.89	.77	.441
IMPLICIT	2.81	2.61	3.07	.002***
EVAL	2.94	2.20	4.11	.000***
SUPER	2.95	2.28	3.78	.000***
FEELING	3.35	3.16	1.09	.279
PROMO	3.25	2.52	4.07	.000***
ASSIGN	3.34	2.97	2.13	.035**
PRIDE	3.49	2.98	2.74	.007***
GROWTH	3.91	3.79	.77	.441
COMPETE	3.65	3.43	1.32	.190
ACCOMP	3.79	3.68	.65	.515
JOBSAT	3.87	3.89	-.08	.933
BETTER	4.08	3.98	.63	.532

***** SIGNIFICANT AT .01**
**** SIGNIFICANT AT .05**

priori defined groups, 2) establishing procedures for classifying statistical units (individuals or objects) into groups on the basis of their scores on several variables, and 3) determining which of the independent variables account most for the differences in the average score profiles of the two or more groups (Hair *et al.*, 1979). The three stages of MDA include derivation, validation and interpretation.

TABLE 4
Results of Discriminant Analysis

DERIVATION				
Chi-square value	Significance	Canonical R	Eigenvalue	Wilk's Lambda
26.93	.01	.48	.296	.77
VALIDATION		**Predicted**	**Group**	
Actual Group	Total	Do Not	Underreport	
Analysis Sample				
Do Not	31	12	19	
Underreport	82	8	74	
Percentage correctly classified = 76%				
Hold-out Sample		Do Not	Underreport	
Do Not	31	12	19	
Underreport	72	11	61	
Percentage correctly classified = 71%				
INTERPRETATION			GROUP	MEANS
Variables	Significance	Standardized Coefficients	Do Not	Underreport
Success	.003	.372	2.33	1.96
Meet	.002	.380	3.73	3.34
Eval	.001	.659	3.36	2.70
Feeling	.001	.347	3.76	3.28
Promo	.001	-.806	3.33	3.09
Accomp	.001	.759	4.30	3.61
Jobsat	.001	-.881	4.23	3.83
Better	.001	.731	4.50	3.93

Since the objective of the study was to identify characteristics that distinguish accountants that underreport time from those that do not, a stepwise method of MDA was used. A cross-validation approach was used to validate the discriminant function. This involved dividing the total sample randomly into two groups. One group (analysis sample = 113) was used to develop the function while the other group (holdout sample = 103) was used to test the discriminant function.

Table 4 summarizes the results of the discriminant analysis. The results show the discriminant function is significant ($p < .01$), which indicates accountants that underreport time differ significantly from those that do not. The canonical correlation coefficient (.48) indicates a moderate degree of relatedness between the groups and the function.

The overall classification accuracy for the analysis sample was 76% and the holdout sample was 71%. Hair *et al.* (1979) note that the proportional chance criterion should be used when group sizes are unequal, which is the case in this study, and the objective is to correctly identify members of groups. The formula for the this criteria is:

$$C \text{ proportional} = p^2 + (1\text{-}p)^2 \text{ where}$$

p = the proportion of accountants who do not underreport time, and
p-1 = the proportion of accountants who do underreport time.

Hair *et al.* suggests the classification accuracy of the function should be at least 25% greater than that achieved by chance. Using this criteria, a classification accuracy of 76% would be considered acceptable. The function's classification accuracy of 71%, therefore, is not acceptable. Accordingly, we cannot reject Hypothesis 3.

Although each of the eight variables listed in Table 4 are significant at $p < .01$, the four variables that provide the greatest contribution to the function are JOBSAT (perception that underreporting leads to job satisfaction), PROMO (perception that underreporting leads to promotion and advancement), ACCOMP (perception that underreporting contributes to accomplishing something worthwhile) and BETTER (perception that underreporting leads to feeling better about oneself). An examination of the group means shows that those accountants that do not underreport are less likely to have a feeling of job satisfaction, accomplishment and self-worth from underreporting time as compared to those accountants that do underreport time. The findings also suggest that accountants that do underreport time are more likely to have a feeling that this behavior leads to promotion and advancement compared to those accountants that do not underreport time. It is also interesting to note that PERCEPTION (perception that underreporting time is ethical) and superiors' requests, either explicit or implicit requests, (significant variables in the Lightner *et al.* (1982) study) were not significant in this study. Such findings suggest that although public accounting firms consider the underreporting of chargeable time as unethical, the characteristics that distinguish those that underreport from those that do not are not driven primarily by the ethics of the decision but rather by the achievement of a goal. Since public accountants are often forced to make ethical decisions during the course of an audit or tax engagement, these findings are alarming.

CONCLUSIONS AND LIMITATIONS

Although public accounting firms have policies that prohibit the underreporting of time, research for the past twenty years shows that this behavior continues. Despite the fact the number of women entering the workforce has increased dramatically during this period, such research has not examined whether there are differences in behavior by gender. There has also been limited research regarding the characteristics of individuals that might be inclined to underreport time. Two specific conclusions can be drawn from this study. First, there are significant differences in the **perceptions** of underreporting and, while women tend to "eat" time more than men, the difference is not statistically significant. This finding suggests that management of public accounting firms, and possibly other service firms (e.g., consulting, legal), should consider how budgets are used in the evaluation and promotion process. Management should clearly communicate (e.g., code of conduct or policy manual) that underreporting will not be tolerated and that such behavior will not be rewarded. Focusing on other factors such as the quality of the work and de-emphasizing the importance of the ability to meet budget as part of the evaluation process can accomplish this. Use of realistic budgets may also reduce the likelihood of underreporting time. The results of this study show that women and men can react differently. Second, there are significant variables that distinguish those that do not report all chargeable hours from those that do. Those that tend to underreport time focus more on achievement of a goal that impacts the individual (i.e., job satisfaction, evaluation and promotion) than the ethical implications. However, the classification accuracy of the discriminant model is not as good as a chance model. This finding suggests that further research is needed to identify additional variables that would explain an accountant's propensity to underreport time. Identification of such variables could be useful for management as additional criteria in hiring decisions as well as identifying current employees that may need training regarding the appropriate way to report chargeable time.

This study makes two primary contributions to the existing literature. First, it shows the impact of gender, which has not been previously examined. Second, the results of the discriminant analysis indicate that those individuals that underreport time, an unethical practice, are more concerned with personal reward than the ethical implications. Additional research, however, is necessary in order to identify other characteristics of those individuals that are likely to "eat" time.

This study is subject to some limitations. First, although we have no reason to believe otherwise, Wisconsin CPAs might not be representative of all CPAs. Second, there are inherent limitations associated with the use of a survey instrument. For example, there is a potential for non-response bias or bias in the reporting of the data since this is a sensitive subject. Third, since we did not control for the type of firm (Big Six/Non-Big Six) or the type of client (private vs. public), we could not determine whether the type of firm or client affects the underreporting of chargeable time. Future research should examine these issues.

APPENDIX A

UNDERREPORTING CHARGEABLE TIME

For the following items, please mark the appropriate item.

Position: Staff _____ Senior _____ Manager _____ Partner _____

Primary Work: Tax _____ Audit _____ Other _____

Gender: Female _____ Male _____

Work Experience: _____ years

Please circle the appropriate response to questions 1-4.

1. What is your perceived ability to underreport time successfully?

Extremely Possible	Very Possible	Somewhat Possible	Slightly Possible	Not Possible
1	2	3	4	5

2. What is your perceived ability to meet budgets by reporting 100% of chargeable time?

Never	Seldom	Occasionally	Fairly Often	Very Often
1	2	3	4	5

3. What is your perception regarding underreporting time being ethical?

Strongly Approve	Approve	Indifferent	Disapprove	Strongly Disapprove
1	2	3	4	5

4. How often does your superior request you to underreport time?

Explicit Requests

Yes, frequently	Yes, occasionally	No, Never
1	2	3

Implicit Requests

Yes, frequently	Yes, occasionally	No, Never
1	2	3

5. In the preceding year, what percentage of your total work is unrecorded chargeable time? _______%

For the following items, please mark the appropriate box.

Likelihood that underreporting leads to reward:

Reward	Very likely	Somewhat likely	Unsure	Somewhat unlikely	Very unlikely
Better periodic performance evaluations					
Superiors think you are as competent or more competent than others at your level					
Feeling more secure about your job with the firm					
Promotion and advancement					
Assignments to jobs that are more interesting and challenging					
Feeling of pride in meeting time budgets for more engagements					
Feeling that you have contributed to your personal growth and development					
Feeling that you are as competent as others at your level					
Feeling that you have accomplished something worthwhile					
Feeling of job satisfaction					
Feeling better about yourself as a person					

References

Akaah, I. 1989. "Differences in Research Ethics Judgements Between Male and Female Marketing Professionals." *Journal of Business Ethics* (Netherlands) V. 8: 375-381.

Akers, M.D. and T. V. Eaton. 1999. "Underreporting Chargeable Time: A Continuing Problem For Public Accounting Firms." *The Journal of Applied Business Research* V. 15, No. 1: 13-20.

Akers, M. D. and D. E. Giacomino. 1999. "Personal Values of Certified Auditors." *Internal Auditing* (January/February) V. 14, Number 1: 19-27.

_______ and _______. 2000. "Ethics and the Accountants' Code of Conduct." *The Journal of Applied Business Research* 16, No. 3: 87-95.

Alderman, C.W. and J.W. Dietrick. 1982. "Auditors' Perception of Time Budget Pressures and Premature Sign-Offs: A Replication and Extension." *Auditing: A Journal of Practice and Theory* (Winter): 54-68.

Azad, A. N. 1994. "Time Budget Pressure and Filtering of Time Practices in Internal Auditing: A Survey." *Managerial Auditing Journal* 9: 17-25.

Beltramini, R., R. Pererson and G. Kozmetsky. 1984. "Concerns of College Students Regarding Business Ethics." *Journal of Business Ethics* 3: 195-200.

Bhagat, R. S., S. M. Allie and D. L. Ford, Jr. 1995. "Coping With Stressful Life Events: An Empirical Analysis." In *Occupational Stress: A Handbook.* Eds. R. Crandall and P. L. Perrewe. Washington, DC: Taylor & Francis.

Brehm, S. S. and S. M. Kassin. 1990. *Social Psychology.* Boston, MA: Houghton Mifflin.

Business Week. 1997. February 17: 64.

Cohen, J., L.W. Pant and D. S. Sharp. 1998. "The Effect of Gender and Academic Discipline Diversity on the Ethical Evaluations, Ethical Intentions and Ethical Orientation of Potential Public Accounting Recruits." *Accounting Horizons* (September): 250-270.

Doucet, M.S. and K. L. Hooks. 1999. "Toward an Equal Future." *Journal of Accountancy* (June): 71-76.

Eaton, T.V. and D. E. Giacomino. 2000. "Personal Values of Business Students: Differences by Gender and Discipline." *Research on Accounting Ethics* V. 5: 83-102.

_______ and _______. 2001. "An Examination of Personal Values: Differences Between Accounting Students and Managers and Differences Between Genders." *Teaching Business Ethics* V. 7: 213-229.

Fagenson, E. A. 1993. "Personal Value Systems of Men and Women Entrepreneurs Versus Managers." *Journal of Business Venturing* 8: 409-430.

Giacomino, D. E. and M. D. Akers. 1998. "An Examination of the Differences Between Personal Values and Value Types of Female and Male Accounting and Nonaccounting Majors." *Issues in Accounting Education* V. 13, No. 3: 565-584.

Hair, J. F., R. E. Anderson, R. L. Tatham, and B. J. Grablowsky. 1979. *Multivariate Data Analysis.* Tulsa, OK: Petroleum Publishing Company.

Havlovic, S. J. and J. P. Keenan. 1995. "Coping With Stress: The Influence of Individual Differences." In *Occupational Stress: A Handbook.* Eds. R. Crandall and P. L. Perrewe. Washington, DC: Taylor & Francis.

Heilman, M. E. 1983. "Sex Bias in the Work Setting: The Lack of Fit Model." In *Research in Organizational Behavior 5.* Eds. L.L. Cummings and B. M. Staw. Greenwich, CT: JAI Press.

Houston, R. W. 1999. "The Effects of Fee Pressure and Client Risk on Audit Seniors' Time Budget Decisions." *Auditing: A Journal of Practice and Theory* 18 Fall: 70-86.

Igbaria, M. and J. J. Baroudi. 1995. "The Impact of Job Performance Evaluation on Career Advancement Prospects: An Examination of Gender Differences in the IS Workplace." *MIS Quarterly* March: 107-123.

Jones, T. M. and F. H. Gautschi III. 1988. "Will the Ethics of Business Change? A Survey of Future Executives." *Journal of Business Ethics* April 7(4): 231-248.

Kelley, T. and L. Margheim. 1990. "The Impact of Time Budget Pressure, Personality, and Leadership Variables on Dysfunctional Auditor Behavior." *Auditing: A Journal of Practice and Theory* Vol. 9, No. 2: 21-42.

Kermis, G. F. and S. Mahapatra. 1985. "An Empirical Study of the Effects of Time Pressure on Audit Time Allocations." *Advances in Accounting* 2: 261-273.

Kraiger, K. and J. K. Ford. 1985. "A Meta-Analysis of Ratee Race Effects in Performance Ratings." *Journal of Applied Psychology* 70: 56-65.

Krugman, S. 2000. "Women in Accounting: Tearing Down Barriers." *Accounting Today* August/September: 1,56.

Lightner, Sharon M., Steven J. Adams and Kevin M. Lightner. 1982. "The Influence of Situational, Ethical, and Expectancy Theory Variables on Accountants' Underreporting Behavior." *Auditing: A Journal of Practice and Theory* Fall: 1-12.

Lightner, S.M., J.J. Leisenring and A.J. Winters. 1983. "Underreporting Chargeable Time." *Journal of Accountancy* January: 52-57.

McDaniel, L.S. 1990. "The Effects of Time Pressure and Audit Program Structure on Audit Performance." *Journal of Accounting Research* Autumn: 267-285.

Newell A. and H.A. Simon. 1972. *Human Problem Solving.* Englewood Cliff, NJ: Prentice Hall.

Peterson, R. A., R. P. Beltramini and G. Kozmetsky. 1991. "Concerns of College Students Regarding Business Ethics: A Replication." *Journal of Business Ethics* 10: 733-738.

Ponemon, L.A. 1992. "Auditor Underreporting of Time and Moral Reasoning: An Experimental Lab Study." *Contemporary Accounting Research* Fall: 171-189.

Rhode, J.G. 1978. *Survey of the Influence of Selected Aspects of the Auditor's Work Environment on Professional Performance in Certified Public Accountants in The Commission on Auditors' Responsibilities Report of Tentative Conclusions.* New York, NY: AICPA.

Smith, W., C. E. Jordan and M. R. Hutton. 1996. "Underreporting Time: Accountants Are Doing It More and Enjoying It Less." *The CPA Journal* Vol. 66, No. 10: 67-70.

Sweeney, J. 1995. "The Moral Expertise of Auditors: An Exploratory Analysis." *Research on Accounting Ethics* 1: 213-234.

Sutherland, V J. and C. L. Cooper. 1988. "Sources of Work Stress." In *Occupational Stress: Issues and Developments in Research.* Eds. J. Hurrell, Jr., L. Murphy, S. Sauter, and C. Cooper. New York, NY: Taylor & Francis.