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# Profile of Female Accounting Majors:

### Academic Performance and Behavioral Characteristics

by Adlyn M. Fraser, Richard Lytle and Carlton S. Stolle

An increasing number of women have been selecting accounting as their undergraduate major field of study at colleges and universities across the country. Evidence has been published to document this trend and to explain some of the reasons behind the growth in enrollment of women in accounting programs.<sup>1</sup> The purpose of this study is to present a partial profile of the woman accounting student developed through a study of female accounting majors at one large (enrollment, 29,000 students) Southwestern university.<sup>2</sup> The characteristics examined in the study were 1) scholastic achievement, as measured by academic performance in undergraduate accounting courses and 2) certain personality traits of the female accounting undergraduate, developed through a psychological test of the manifest personal needs of individuals.

#### Scholastic Achievement

An examination was made of the performance in undergraduate accounting courses by female and male accounting majors for five semesters, beginning with the Fall semester of 1975 and extending through the Fall semester of 1977. The courses covered in the survey were Intermediate Accounting (consisting of two three semester-credit-hour courses), Cost Accounting, Advanced Accounting, Income Tax, Auditing, and Accounting Theory. Final grade averages were computed in each course for all female accounting majors enrolled in the course and all male ac-18/The Woman CPA

counting majors. A t-test was then applied to determine the statistical significance of the differences in the means obtained. The results are presented in Table 1.

The female accounting majors performed slightly better than the men in undergraduate accounting courses, but most of the differences found were not statistically significant. For the total of thirty-five observations (seven courses for five semesters) made in the study the grade average of female accounting majors exceeded the male average in twenty-five cases. Of these, three were statistically significant. The average grade for the men was greater than that for the women in ten instances, of which one was statistically significant (i.e., Intermediate Accounting-II; Spring, 1977).

There did not appear to be any notable trend with respect to performance in particular courses with the exception of Advanced Accounting, for which the women's averages were higher in all five semesters, one of which was statistically significant. The women did outscore the men in four of five semesters both for Intermediate I and Accounting Theory, but only one difference was significant.

#### **Behavioral Characteristics**

Another means of analyzing the characteristics of women who choose to study accounting is to look at nonacademic variables, such as personality traits. The psychological/sociological variables against which to measure a population seems almost endless, but for this study one specific test was chosen which measures certain manifest personal needs of individuals and has a background of use in business research.<sup>3</sup> The Edwards Personal Preference Schedule measures one's manifest needs in the following thirteen areas:<sup>4</sup>

> Achievement Deference Order Exhibition Intraception Succorance Dominance Abasement Nurturance Change Endurance Heterosexuality Aggression

This test was used because need satisfaction is exercised through the students' choice of certain fields of study. Also, measured needs are often considered to be indicators of success in accounting and are, therefore, the ingredients which recruiters attempt to identify when interviewing job-seeking women. For example, a high need to achieve might indicate that one has the necessary drive to reach a high level of professional attainment through high calibre job performance, initiative and desire. A high order need might indicate that one is capable of organizing her work, her priorities and to conform to a particular firm or professional image.

Endurance might also be important. Accounting often demands long hours, late-night work, periods of considerable psychological pressure and client antagonism which demands that one not be a quitter.

The Edwards test was administered to senior women accounting majors. There were 102 usable results. The means and standard deviations are presented on Table II under the column headed "Student Test Group." The average raw score earned by accounting majors was compared for each tested variable (a) to the average raw score other college women from a cross-section of disciplines ("Normative Group" column) and (b) to women practitioners of accounting ("Accounting Practitioners" column). An item-by-item analysis reveals some interesting profiles. The differences were tested by using the ttest for significant differences between the means.

#### **TABLE I**

#### Final Grade Average Of Accounting **Majors For Various Courses**

	Fall '75	Spring '76	Fall '76	Spring '77	Fall '77
Intermediate-I					
Women	2.43	2.41	1.94	2.36	2.34
Men	2.26	2.33	1.89	2.54	<u>1.94</u>
Difference	.17	.08	.05	18	.40
Intermediate-II					
Women	2.26	2.89	2.08	2.13	1.92
Men	2.45	2.43	<u>1.76</u>	<u>2.66</u>	2.07
Difference	19	.46	.32	53*	15
Cost Accounting					
Women	3.15	3.13	3.02	2.63	3.00
Men	2.89	3.07	2.92	2.78	3.09
Difference	.26	.06	.10	15	09
Advanced Accounting					
Women	2.48	2.29	2.62	2.68	2.79
Men	<u>1.43</u>	2.23	2.43	2.49	2.46
Difference	1.05*	.06	.19	.19	.33
Income Tax					
Women	3.09	.285	2.91	2.50	2.69
Men	2.82	2.94	2.68	2.60	2.49
Difference	.27	09	.24	10	.20
Auditing					
Women	3.22	3.35	3.24	3.07	2.54
Men	3.15	<u>2.92</u>	2.96	3.08	2.62
Difference	.07	.43*	.28	01	08
Accounting Theory					
Women	2.89	2.96	2.72	2.55	2.80
Men	3.04	2.45	2.58	2.31	2.50
Difference	15	.51	.14	.24	.30
Note: A=4.0, B=3.0, C=2.0	, D=1.0				

\* Probability Less Than .01

Achievement. The women accounting students tested revealed a significantly higher achievement need than their college-age counterparts. Accounting study seems to have attracted a higher achiever: however, there was no significant difference in achievement need when the women accounting students were compared to women accounting practitioners. This would indicate that women practitioners and women studying accounting are much alike in needs to achieve.

Deference. This trait measures one's need to get input, to seek advice, and to elicit suggestions and accept orders from others. Interestingly, women accounting students showed significantly less need in this area than did either other college women or women accounting practitioners.

Order. The need for order is significantly higher in the test group than in other college women, but was not significantly different from the order needs of the practitioners, again indicating more similarity than dissimilarity between women studying and practicing accounting.

Exhibition indicates the need to be noticed, to stand out, and to be the center of attraction. It is difficult to speculate on the importance of this need to the accounting professional. Certainly, exhibition done in a tasteful, discrete. professional manner is desirable, but not if done in an audacious, raucous way. The women in the test group were not significantly different from other October 1978/19

#### **TABLE II** Comparison of Manifest Needs of Women Accounting Students with Normative Group and Practitioners

	Test	udent Group =102)	Gr	rmative oup a =749)	Student Test Group Compared to Normative Group	Pract	ounting itioners b =100)	Student Test Group Compared to Accounting Practitioners
Trait	Mean	Std. Dev.	Mean	Std. Dev.	Difference	Mean	Std. Dev.	Difference
Achievement	15.45	3.69	13.08	4.19	2.37*	14.43	3.92	1.02
Deference	11.35	3.30	12.40	3.72	-1.05*	13.38	3.40	-2.03*
Order	12.26	3.91	10.24	4.37	2.02*	13.00	4.92	74
Exhibition	13.99	4.33	14.29	3.65	30	11.50	3.66	2.49*
Autonomy	11.92	4.25	12.29	4.34	37	12.80	3.81	88
Affiliation	16.20	4.29	17.40	4.07	-1.20*	15.73	4.27	.47
Intraception	15.72	4.68	17.32	4.70	-1.60*	16.57	4.26	85
Succorance	13.52	4.55	12.53	4.42	.99	11.27	3.92	2.25*
Dominance	14.62	5.53	14.18	4.60	.44	11.57	5.06	3.05*
Abasement	13.14	4.57	15.11	4.94	-1.97*	16.47	4.55	-3.33*
Nurturance	14.89	4.31	16.42	4.41	-1.53*	14.63	4.15	.26
Change	15.89	5.14	17.20	4.87	-1.31	16.90	4.70	-1.01
Endurance	14.58	4.87	12.63	5.19	1.95*	16.90	4.06	-2.32*
Heterosexuality	15.50	4.90	14.34	5.39	1.16	11.77	6.94	3.73*
Aggression	11.00	4.65	10.59	4.61	.41	11.97	4.25	97

\* Difference significant, probability less than .01.

a Data supplied by The Psychological Corporation.

b Data supplied by study done by Rose Knotts.

college women but had a higher need to be noticed and in the limelight than women practitioners. To explain this difference in the women students we might speculate that this need diminished with maturity and growth of selfconfidence as the woman gets older.

Autonomy is the need to feel responsible for making one's own decisions, for being able to come and go much as one pleases. This need was not different for any of the three groups; that is, all felt about the same need for autonomy.

Affiliation, the need to be associated with, to be with and to work with others, was significantly lower for the accounting students than in the college women generally. This begins to paint an interesting picture in that the woman studying accounting may be more of a decision maker and more independent than her college counterpart when considering both the affiliation and deference scales.

Intraception is the need to analyze the motives for one's own actions or thoughts and those of others. The women studying accounting were not unlike the women practitioners in this need but were significantly lower than the other college women in the intraception scale.

Succorance, the need to receive support and encouragement from others, is significantly higher in the women accounting students than in the woman practitioner. The practitioner has less need for the "pat on the back" than either of the college age groups perhaps because the practitioner has reached a higher level of self-confidence and esteem with maturity.

Dominance. The need to control, to lead and to feel in command of the situation was no different for the women accounting students than for women students in general. However, the woman practitioner seems to have significantly less need to dominate and seems to be more inclined to acquiesce.

Abasement is the need to accept self blame and assume full responsibility for the outcome of events rather than putting the responsibility off on an outside source. In this variable, the women accounting students demonstrated less abasement need than did their college age counterparts or women accounting practitioners.

Nurturance, the need to give support, is almost the anonym of succorance. The women accounting majors were no different from the accounting practitioners in this regard but were significantly lower in this need than college women generally.

Change, the need to deviate from the routine, and to experience new and different things, was no different for any of the groups.

Endurance is one variable which is often considered important to accounting. The women accounting majors demonstrated significantly more endurance needs than other college women, but significantly less than women practicing accounting. This causes us to speculate that the ranks of women practitioners from which the data were drawn may have been purged of those who did not have the high endurance needs.

Heterosexuality. unknown in its importance to accounting as opposed to other disciplines, is the need to be with persons of the opposite sex. This study indicates that the college women, accountants and others, were no different. The college age women studying accounting did demonstrate a higher heterosexuality need than women practitioners, though. This difference might be explained by the age/maturity differential.

Aggression is the need to attack contrary points of view and the need to

# TABLE III Manifest Need Differences Between Women and Men Accounting Majors

		/omen n=102)	(r	Difference	
	Mean	Std. Dev.	Mean	Std. Dev.	Between Means
Achievement	15.45	3.69	15.99	4.17	54
Deference	11.35	3.30	10.54	3.72	.81
Order	12.26	3.91	11.59	3.99	.67
Exhibition	13.99	4.33	14.18	4.48	19
Autonomy	11.92	4.25	13.73	4.02	-1.81*
Affiliation	16.20	4.29	14.48	5.14	1.72*
Intraception	15.72	4.68	14.11	4.74	1.61
Succorance	13.52	4.55	10.77	4.86	2.75*
Dominance	14.62	5.53	17.43	5.73	-2.81*
Abasement	13.14	4.57	13.24	5.32	10
Nurturance	14.89	4.31	14.52	5.54	.37
Change	15.89	5.14	13.50	5.26	2.39*
Endurance	14.58	4.87	14.97	5.35	39
Heterosexuality	15.50	4.90	16.29	5.72	79
Aggression	11.00	4.65	13.55	4.83	-2.55*

\* Differences between means significant at the .01 level.

argue. No significant differences were noted among the three groups.

As shown in Table III, there were no significant differences between the mean scores for the men and women for achievement, order or endurance. Women had just as high a need to achieve, to have an ordered existence and as high an endurance level as the men. This observation is interesting amidst a certain amount of bias which has been historically associated with women in business.

There were, however, other areas of difference. Women had significantly *higher* needs than the men in the following: affiliation, succorance (i.e., need to give support), and change. This latter trait — change — suggests a more adventuresome drive in the women.

In general, the results of the study indicate that the women accounting majors surveyed performed somewhat better in undergraduate accounting courses than the males, but that the differences were for the most part not significant. Women in accounting do differ, however, in some important respects from other college women. They have higher needs for achievement and for order, and have more endurance relative to other college age women. These traits would seem desirable for jobs in public accounting.

#### Notes

<sup>1</sup>M. Weston and J.P. Matoney, "More College Women Majoring in Accounting: The Numbers and Some Reasons," *Woman CPA*, V. 38, January 1976.

<sup>2</sup>The study was conducted at Texas A&M University where, corresponding to the trend nationally, the number of women accounting majors has been increasing with each successive entering class. Comparing the graduating classes of 1977 to the class which will graduate in 1981, the number of women selecting accounting as their major has more than doubled, rising from 92 to 190 students. Simultaneous with this occurrence has been a leveling-off of men accounting majors, particularly in the last three years. The net result has been an increasing proportion of female accounting majors relative to men; in the two most recently entering classes at Texas A&M, there were more women than men accounting majors; 176 and 190 females in the classes of 1980 and 1981, and 164 and 161 males, respectively.

Freshmen and other students entering the university choose a major field of study at time of entry. Evidence shows that a large number of students entering college graduate in a major different from the one which they originally selected. Approximately forty-two percent of the women accounting students involved in this study changed into accounting after having previously enrolled in some other discipline. In addition, an analysis of a recent class of graduates revealed that only fifty-one percent entered the university as accounting majors. This percentage was similar for men as well as for women.

<sup>3</sup>Rose E. Knotts, "Manifest Needs of Professional Female Workers in Business Related Occupations," *Journal of Business Research*, July 1975, pp. 267-76.

<sup>4</sup>Allen L. Edwards, *Edwards Personal Preference Schedule*, revised manual. The Psychological Corporation, 1959.



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