To the Graduate Council:

I am submitting herewith a thesis written by Susan Kay Williams Armontrout entitled "The Relationships of Certain Educational and Experience Background Factors to Successful or Unsuccessful Completion of the CPS Examination by New Candidates in 1978." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Business Education.

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THE RELATIONSHIPS OF CERTAIN EDUCATIONAL AND EXPERIENCE BACKGROUND FACTORS TO SUCCESSFUL OR UNSUCCESSFUL COMPLETION OF THE CPS EXAMINATION BY NEW CANDIDATES IN 1978

A Thesis

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ABSTRACT

The problem of this study was to determine the relationships among certain background factors of Certified Professional Secretary (CPS) candidates and success on the 1978 CPS examination. The background factors included the frequency with which certain secretarial duties were performed by new candidates, the overall ratings of candidates by their past and present employers, and the educational levels of the candidates. Successful and unsuccessful candidates were compared on those background factors.

The selection of duties to be included in the study was based on a comparison of the secretarial job descriptions of ten large companies. The duties which were performed by at least 50 percent of the highest-level secretaries and by at least twice as many higher-level secretaries as lower-level secretaries were selected for inclusion in the study. The duties selected included originating written communications, making travel arrangements, gathering research material for reports and/or speeches, supervising other employees, preparing for meetings and keeping notes and minutes at meetings, receiving and placing telephone calls, and obtaining information from and supplying information to other offices.

In 1979, Kathryn Snodgrass performed a study involving 2,074 experienced secretaries who were approved to take the 1978 CPS examination. That study identified 354 candidates who passed zero, one, five, or six parts of the 1978 examination. Of those candidates,

100 who passed five or six parts of the examination and 100 who passed one or no parts of the examination were compared in the current study.

Information needed for the study was collected from the application forms and employer's evaluation forms completed by and for 200 secretaries involved in this study. Average task performance frequencies were determined, and t-tests were used to study the relationships among success on the examination and the frequency with which certain duties were performed, the educational level of the candidate, and the employers' overall ratings of the candidate.

The frequency of performance of the duties of originating written communications, making travel arrangements, gathering research materials for reports and/or speeches, preparing for meetings and keeping notes and minutes at meetings, and obtaining information from and supplying information to other offices, considered independently, were found not to be related to success on the 1978 CPS examination. The employers' overall ratings of the secretary were also found not to be related to success on the examination.

The frequency of performance of the duties of supervising other employees and receiving and placing telephone calls were found to be related to success on the examination. The secretary's level of education was also related to successful completion of the examination.

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CHAPTER I

INTRODUCTION

Confusion about the term secretary has caused persons worthy of the title to search for a method of identifying themselves and being recognized for their abilities. One such method of distinguishing themselves is the attainment of the Certified Professional Secretary (CPS) rating.

The CPS rating is attained by meeting certain standards and completing the CPS examination. A person capable of earning the CPS rating through the CPS examination is truly worthy of the title "secretary" as defined by the National Secretaries Association (NSA). The NSA (International), which was renamed Professional Secretaries International early in 1981, defines a secretary as

> an executive assistant who possesses a mastery of office skills, who demonstrates the ability to assume responsibility without direct supervision, who exercises initiative and judgment, and who makes decisions within the scope of assigned authority.[1]

The aspiring CPS will find in this study a comparison of the most successful and least successful candidates for the 1978 CPS examination. Comparisons were based on the level of education, frequency with which certain duties were performed, and overall ratings by employers of those candidates.

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[1] Capstone, Kansas City: Institute for Certifying Secretaries, 1980, p. 9.

A. STATEMENT OF THE PROBLEM

The problem of this study was to determine the relationships among certain background factors of CPS candidates and their success or lack of success on the 1978 CPS examination. The background factors included the frequency with which certain secretarial duties were performed by new candidates, the overall ratings of candidates by their past and present employers, and the educational levels of the candidates. Successful and unsuccessful candidates were compared on those background factors.

B. ANALYSIS OF THE PROBLEM

To determine whether certain factors were related to success on the 1978 CPS examination, the study sought to answer the following questions:

1. Was there a relationship between success on the examination and the frequency with which each of the following duties was performed when each duty was considered independently?
   a. originating written communications
   b. making travel arrangements
   c. gathering research material for reports and/or speeches
   d. supervising other employees
   e. preparing for meetings, keeping notes and minutes at meetings
   f. receiving and placing telephone calls
   g. obtaining information from and supplying information to other offices

2. Was there a relationship between success on the examination and the employers' overall ratings of the secretary?
3. Was there a relationship between success on the examination and the number of years of formal post-secondary education?

C. SCOPE OF THE STUDY

The study compared new candidates for the 1978 CPS examination who met all eligibility requirements. All information was obtained from information still on file from secretaries who first applied to take the examination in 1978. The factors explained below affected the study.

Incomplete information. Information about the frequency with which the secretaries performed certain duties was taken from the employer's evaluation forms for each candidate. Many of the evaluation forms were not marked, unclearly marked, or marked with some statement of inability to recall the secretary's performance.

Vague terms. To describe the frequency with which duties were performed, employers responded with the terms "frequently," "occasionally," and "never." The only concrete term used in these descriptions was the term "never."

Sample. A sample was used. Only 100 of the 454 successful candidates and 100 of the 905 unsuccessful candidates were included in the study. Application forms and employer's evaluation forms were not available for all successful or unsuccessful candidates. Only

those candidates who first applied to take the examination in 1978 and for whom the Institute for Certifying Secretaries (ICS) could furnish data were included in the sample selection.

Computation of performance frequencies for duties. The computation of the frequency of performance of various duties was based only on the evaluation forms returned by employers who were checked by the ICS for job verification purposes. Therefore, the computation may not have included input from all of the past employers of each candidate, resulting in an incomplete evaluation of the candidates' total work. Because only evaluations returned by employers were available, equal weight was given to the performance frequencies indicated for jobs held only short periods of time and those held for longer periods of time. No attempt was made to assign a value to work experience on the basis of time spent in a position.

Identification of duties. The identification of duties for inclusion in the study was based on job descriptions furnished by ten companies. The job descriptions furnished by those companies provided a basis for building a list of duties performed by their secretaries. Frequencies of performance of secretarial duties by 1978 CPS candidates, however, were tallied from evaluation forms completed by the employers of the candidates. Those duties identified on the employer's evaluation forms, in some cases, may not be identical in nature to the overall descriptors identified by the job descriptions. Classification of duties described on evaluation forms was matched by the researcher to the duties in job descriptions.

Evaluation of education. Information concerning the level of education attained by each candidate was based only on information supplied on the application form. Many secretaries may not have reported education accurately since the application form did not include a question about actual years of college level education. Some secretaries may have believed that this information was not necessary to qualify to take the examination; therefore, they did not indicate the amount of college work completed.

D. DEFINITIONS OF TERMS

Six terms which are used in the current study are defined below.

Certified Professional Secretary (CPS) Rating--a professional rating for secretaries similar to the CPA rating for accountants. The rating is earned by passing the CPS examination and meeting the six-year minimum experience requirement. Up to four years of the experience requirement may be offset by equal lengths of time spent in education, but at least one full year must be completed in continuous full-time employment with one employer.

Certified Professional Secretary (CPS) Examination--a six-part examination taken by secretaries in fulfillment of the requirements for the CPS rating. The examination measures understanding of behavioral science in business, business law, economics and management, accounting, secretarial skills and decision making, and office procedures and administration.

Institute for Certifying Secretaries (ICS)--an organization established by the National Secretaries Association, NSA, (renamed

Professional Secretaries International /PSI/ in 1981) to prepare and administer the CPS examination and to promote the CPS program.

Most Successful Group on the 1978 CPS Examination (Upper Group)--secretaries who took the examination for the first time in 1978 and passed either five or all six parts of the examination during their first attempt.

Least Successful Group on the 1978 CPS Examination (Lower Group)--secretaries who took the examination for the first time in 1978 and passed either one or no parts of the examination during their first attempt.

Level of Education--number of years of formal post-secondary education completed.

E. IMPORTANCE OF THE STUDY

Through the efforts of people concerned with the professionalism of secretaries, such as secretarial organizations and business teachers, the CPS rating has become more widely understood and recognized by both secretaries and their employers. Many secretaries, having come to a better understanding of the value of the CPS title, have begun their efforts toward obtaining that title.

Secretaries who are presently trying to complete the CPS examination and secretaries who plan to begin working toward completion of the examination will be most interested in this study. A purpose of the current study was to compare the relationships of the level of education, frequency of performance of certain secretarial duties, and employers' overall evaluations to successful completion of the CPS

examination. Secretaries can study factors such as these to help determine at which point in their secretarial careers they will be most prepared to undertake the challenge of sitting for the CPS examination.

Another purpose of the current study was the identification of duties deserving in-depth study. Duties included on the employer's evaluation form may not be representative of actual duties now performed by secretaries. This study identifies duties that were on the employer's evaluation form and were performed by secretaries in ten companies. This study can furnish information for a more accurate listing of selected duties on that form and could lead to further research on duties currently performed by secretaries.

F. HYPOTHESES

The hypotheses of this study were as follows:

1. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of originating written communications was performed.
2. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of making travel arrangements was performed.
3. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of gathering research materials for reports and/or speeches was performed.

4. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of supervising other employees was performed.
5. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of preparing for meetings and keeping notes and minutes at meetings was performed.
6. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of receiving and placing telephone calls was performed.
7. There is no relationship between successful completion of the CPS examination and the frequency with which the duty of obtaining information from and supplying information to other offices was performed.
8. There is no relationship between successful completion of the CPS examination and the employers' overall ratings of the secretary.
9. There is no relationship between successful completion of the CPS examination and the level of education of the secretary.

G. ORGANIZATION OF THE STUDY

This study is organized into five chapters. Chapter I includes an introduction, statement of the problem, analysis of the problem, scope of the study, definitions of terms, importance of the study, hypotheses, and organization of the study.

Chapter II includes the history of the CPS program and studies concerning factors related to success on the CPS examination.

Chapter III includes the nature and sources of data, selection of duties to be studied, and procedures.

Chapter IV includes the results of the study.

Chapter V includes the findings, conclusions, and recommendations.

The Appendixes include tables of average performance frequencies of secretaries, both successful and unsuccessful candidates; a table showing the calculation of t-scores reported in the study; statements supporting duties performed by high-ranking secretaries; the form used in 1978 for application to take the Certified Professional Secretary examination; and the form used in 1978 for employers' evaluations of secretaries.

CHAPTER II

HISTORY OF AND RESEARCH RELATED TO THE CPS EXAMINATION

Several studies related to the CPS examination have been conducted. The studies which have been conducted in the past have been primarily concerned with four major areas: history of the CPS examination, factors related to success on the CPS examination, value of attaining the CPS title, and validity of various parts of the CPS examination.

For the current study a review of the history of the CPS examination and of the studies concerning various factors related to success on the CPS examination was helpful. Therefore, this section will be divided into two basic parts: (A) Background of the CPS Program and (B) Studies Concerning Factors Related to Success on the CPS examination.

A. BACKGROUND ON THE CPS PROGRAM

Establishment of the Institute for Certifying Secretaries

When the NSA was established in 1942, its goal was the "evaluation of the standards of the secretarial profession."[1]

In 1945 Sterling F. Mutz recommended the establishment of a secretarial certifying program which would be similar to the certifying

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[1]William Mitchell, "The Certified Professional Secretary (CPS)," National Business Education Yearbook, XII, 1974, p. 245.

programs of other professions. When this suggestion was brought to the attention of the NSA Board of Directors, they began a study of the feasibility of a certifying program. In 1948, the NSA Board of Directors held a conference to discuss the certification possibilities and, after several meetings, formed an organization to carry out the certifying program--the Institute for Certifying Secretaries.

The Institute for Certifying Secretaries was developed in 1949 for the purpose of preparing and administering the CPS examination and promoting the CPS program. The ICS was charged with the "responsibility of developing an educational program for employed secretaries, one that would somehow 'certify' the especially qualified ones and help them gain recognition in the world of business."[2] The NSA saw the necessity for the Institute and for the CPS examination because the secretarial profession was losing its status due to the increasing trend of calling all clerical and stenographic workers secretaries. Through the promotion of the CPS program, the NSA hoped to encourage secretaries to strive to improve themselves, clarify the status of secretarial work, give secretarial personnel a higher standing in the eyes of management, and identify the personnel qualified to perform secretarial work at a high level.[3]

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[2]Mathilde Hardaway and Thomas B. Maier, Tests and Measurements in Business Education, Cincinnati: South-Western Publishing Company, 1952, p. 280.

[3]Ibid., p. 10.

Hanna, Popham, and Beamer included in Secretarial Procedures and Administration the following definition of the term "secretary" which was adopted shortly before 1968:

> An assistant to an executive, possessing mastery of office skills and ability to assume responsibility without direct supervision, who displays initiative, exercises judgment, and makes decisions within the scope of her authority.[4]

Present Institute for Certifying Secretaries

The Institute is currently comprised of 21 members, who each serve three-year terms. The members include:

6 members from NSA
6 members from education
6 members from management
1 Canadian associate
president and immediate past president of NSA

The members of the Institute must have a deep interest in the secretarial profession, have achievements and recognition in their own fields, have leadership ability, be willing to devote the time necessary for the CPS program, and, if representing NSA, must be CPSs.

The current ICS has found little need to change the definition of the term "secretary" from the initial version published in 1968. Some minor rewording resulted in the following current definition:

> An executive assistant who possesses a mastery of office skills, demonstrates the ability to assume responsibility without direct supervision, exercises initiative and judgment, and makes decisions within the scope of assigned authority.[5]

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[4]J. Marshall Hanna, Estelle L. Popham, and Esther Kihn Beamer, Secretarial Procedures and Administration, 5th Edition, Cincinnati: South-Western Publishing Company, 1968, p. 3.

[5]Capstone, Kansas City: Institute for Certifying Secretaries, 1980, p. 1.

Qualifications for Taking the CPS Examination

CPS certification is open to both males and females of any age, and membership in NSA is not a requirement for certification.

The CPS candidate does not have to be a secretary at the time of application to take the examination but must have a minimum of six years of experience or a combination of post-secondary education and experience totaling six years. Education may account for no more than four years, and at least two years must be verified secretarial experience.

Full-time employed secretaries or college/university students may take the CPS examination before meeting all of the educational and experience requirements, but the requirements must be met before the CPS certification is awarded. "All requirements must be met within six (6) years of the date of approval of the application to take the examination."[6]

> When secretarial experience is completed before taking the examination, one (1) year of the required experience must have been for twelve (12) months continuous with one employer in the past five (5) years and the total required experience within the past twenty-five (25) years.[7]

Description of the CPS Examination

The examination consists of six parts. Five of the six parts are multiple choice, but one part, Part V, requires that an in-basket exercise requiring typing be done. Parts II, III, IV, and VI have 100 questions each; Part I has 150 questions. Though the test is

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[6]Ibid., p. 2.

[7]Ibid.

constantly updated, the items from all sections except Part V are statistically analyzed each year so that the most valid and reliable items may be reused on later tests. A brief description of each part follows:

1. Behavorial Science in Business. This part tests the principles of human relations.
2. Business Law. This section tests the major elements of business law involved in the secretary's daily work and public policy in the form of governmental regulatory legislation.
3. Economics and Management. This part tests the understanding of economics, principles of management, and elements of business operation.
4. Accounting. This part tests basic accounting procedures.
5. Secretarial Skills and Decision Making. This section is subjective. During the first 30 minutes the candidate must decide the priority in which several items should be completed. The candidate must then complete specific items in the order directed. Candidates may furnish their own typewriters for this part of the examination. This section is completely rewritten and tested before use each year. Past copies of this section are printed each year in the SECRETARY to help secretaries understand how to prepare for this part of the examination.
6. Office Procedures and Administration. This section tests basic concepts of office management and basic familiarity

with electronic data processing as well as various areas of secretarial planning and communications.[8]

B. RESEARCH ON CERTAIN FACTORS OF SUCCESS ON THE CPS EXAMINATION

Six studies have been reviewed here. Five of the studies identify factors of success on the examination, and one identifies duties performed by secretaries. These studies are related to the present study in methods and procedures, or they furnish additional information about secretarial duties.

Petree[9]

Helen C. Petree completed a master's thesis at The University of Tennessee in 1966. The first purpose of her study was to determine what office position was appropriately referred to as "secretary" based on an analysis of titles being used at that time. Another purpose was to determine what other titles were being used to designate various levels of secretarial-stenographic positions. The final purpose was to determine whether there was a similarity of duties normally assigned to the various levels which could be used as a pattern for developing standard job descriptions on a nationwide basis.

The information for this study was obtained from secretarial job descriptions submitted by NSA chapters. Job descriptions from

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[8] Ibid., p. 3.

[9] Helen C. Petree, Development of Modal Job Descriptions for Secretarial-Stenographic Jobs, Master's Thesis, The University of Tennessee, 1966.

603 companies were supplied when the NSA Board of Directors requested all chapter presidents to cooperate in collecting job descriptions. Each chapter was asked to submit a minimum of three job descriptions from each of five companies and to include only those descriptions developed and approved by a company. Descriptions were coded to allow anonymity for the companies supplying job descriptions.

Only the descriptions of companies meeting four requirements were used in the final sample. The four requirements for inclusion in the study were: (1) the company either originally or upon request for missing descriptions submitted complete sets of job descriptions, (2) the set of descriptions had at least three levels which used either the word "stenographer" or the word "secretary" in their title, (3) each contained more than ten lines, and (4) the job level was clearly identified. After 165 companies which met these four requirements were identified, they were divided into six groups according to the number of secretarial-stenographic levels they used. The fourteen companies with either six, seven, or eight levels were then excluded from the study because there were not enough participating companies in these groups. The resulting sample consisted of 151 companies.

Job descriptions were analyzed for titles and duties. As each set of descriptions was read, the titles used for each job level were noted and lists of phrases describing duties were developed. When selecting phrases to be used in modal job descriptions, phrases used by more than 50 percent of the companies were considered regular duties, and phrases used by 20 to 50 percent of the companies were

considered occasional duties. As a result, 12 job descriptions containing 82 descriptions of duties performed or key phrases were developed.

Some of Petree's findings were:

1. The title preferred for secretarial-stenographic jobs on the top level was Executive Secretary; for the second level, Secretary; and for the bottom level, Stenographer.

2. Ten general categories of duties and one category of general requirements were used in the job descriptions analyzed. (The categories of duties included dictation, typewriting, filing, telephone, mail, personal contacts, office machines, personal, records and reports, and responsibilities.)

3. Sufficient uniformity existed among the 151 companies to formulate 12 job descriptions.[10]

Some of Petree's conclusions were:

1. Secretarial-stenographic positions have in common broad general categories of duties.

2. The degree to which duties are requirements of the different secretarial-stenographic positions is extremely varied.

3. The duty of handling mail varies to a lesser degree than any other category of duty.

4. The duty of attending to personal tasks for supervisor and the duty of assuming responsibilities vary to a greater extent than any other category of duty.

5. The duty of attending to personal tasks for supervisor (appointments, travel arrangements, organizing material for speeches, etc.) is very narrow in scope, if it exists at all, in secretarial-stenographic positions at the lowest level.

6. Analyses of written job descriptions with the same titles are not a satisfactory method for formulating job descriptions to be used as composite descriptions for secretarial-stenographic positions.[11]

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[10]Ibid., pp. 105-106.

[11]Ibid., pp. 131-132.

One of Petree's recommendations was that future researchers should realize that if no consideration is given to the lack of consistency between titles and duties performed there may be errors in studies of secretarial duties performed by secretaries at specific levels.

The present study is related to the Petree study in methods and procedures used. Both studies required that companies supplying job descriptions be large enough or complex enough to supply complete descriptions for at least three job levels. Both studies assumed that 50 percent was a sufficient percentage of secretaries performing particular duties to warrant the inclusion of those duties. Petree's study was a general guide for the selection of duties to be included in the present study.

Lockwood[12]

Bonnie Allen Lockwood completed a dissertation at the University of Pittsburgh in 1954 in which she identified some of the characteristics and duties of the secretaries who passed the CPS examination and compared them with the characteristics and duties of secretaries who passed only two or fewer parts of the examination.

Three general areas were considered for this study. The first area involved how the CPSs prepared themselves through education, work experience, assumption of financial responsibilities, and social activity. The second area of concentration was the job status of CPSs;

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[12]Bonnie Allen Lockwood, A Study of the Characteristics and Duties of Certified Professional Secretaries, Doctoral Dissertation, University of Pittsburgh, 1954.

and the final area involved significant character traits, competencies, and understandings possessed by CPSs.

The population for the study included those secretaries who had passed the entire examination and those who had passed zero, one, or two sections. The final return of questionnaires and work charts led to a usable sample of 119 CPSs and 65 non-passing secretaries. Information about education and experience was obtained from questionnaires. This information was generally analyzed and comparisons were based on medians, means, standard deviations, and/or bi-serial correlations.

When work charts were received from the secretaries, Lockwood was able to identify most duties as belonging in a particular level (clerical, stenographic, or unclassified). Then the two groups were compared by the percentage of duties reported as secretarial or above and those reported as below secretarial.

The bi-serial coefficient of correlation indicated that higher education was related to success on the examination. The study showed that the certified group had an average of one and one-half years more higher education than did the noncertified group. Though more of the non-passing group majored in business in high school or business school, the CPSs had an average of almost three more one-year courses directly related to the examination than did the noncertified secretaries. While 48 percent of the non-passing group took NSA refresher courses, only 39 percent of the CPSs took such courses.

Lockwood found that "the amount of work experience in itself does not contribute to passing the CPS examination.[13] She also found that the variety of work experience as determined by the number of jobs held was not a significant factor related to success on the examination. Comparisons of the types of jobs held, however, revealed that the certified secretaries had more years of experience in higher work classifications.

In summary for the background factors, Lockwood found education to be the most significant factor related to success on the examination. The level at which work experience was obtained was the only significant work experience factor. Financial home responsibilities and social backgrounds did not appear to be significant factors.

In studying the job status of CPSs, Lockwood found that while the average age of CPSs was three years less than for noncertified secretaries, they earned an average of $10 a week more. The study also revealed that the median income for CPSs was three times the median income for women workers in general as revealed by the 1950 census.

Lockwood found that the CPSs generally performed more varied duties and performed them at a higher level than did noncertified secretaries. She also observed that CPSs were noted for consideration for employers, fellow employees, and office visitors; accuracy, efficiency, and initiative; and ability to handle top-level work responsibilities.

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[13]Ibid., p. 39.

As a result of this study, Lockwood drew the following conclusions concerning the CPS examination:

1. The examination has effectively identified top-level secretaries, as measured by level of experience, education, job status, job title, and performance on the job.

2. The qualifications necessary to pass the examination are higher than the minimum qualifications established for admission to take the examination.

3. The stenographic section of the examination discriminates against the top-level secretary who composes most of her own letters or uses a voice recording machine.[14]

Lockwood also made the following recommendations for teachers of secretarial subjects.

1. Good human relations should be stressed throughout all courses in the educational program; and some courses should be devoted entirely to a consideration of the human relations problems of the secretary. Effective human relations are of primary importance to the top-level secretary.

2. Prospective secretaries should be encouraged to take part in a reasonable amount of social activity, and efforts should be made to see that their participation is effective.

3. Education for secretaries should be broad, for the job encompasses a great variety of duties and demands sufficient background on the part of the worker to adapt readily to new things.

4. More prospective secretaries should be encouraged to take bookkeeping or accounting, for most top-level jobs demand a reasonable ability in this field. Record keeping, general bookkeeping, making calculations on business papers, and preparing financial reports were important jobs for both groups of secretaries.[15]

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[14] Ibid., p. 90.

[15] Ibid., p. 91.

Montgomery[16]

George Frank Montgomery completed a dissertation in 1969 at the University of North Dakota to determine and analyze factors contributing to success or failure on the 1967 CPS examination. The factors Montgomery concentrated on were

> (1) the amount of formal education, (2) the value of formal courses taken, (3) the years of on-the-job work experience, and (4) the methods used in preparation for the examination that tend to contribute favorably to obtaining the Certified Professional Secretary certificate.[17]

The sample for this study was comprised of 225 secretaries who were certified through the 1967 CPS examination (Group I) and 165 secretaries who passed zero, one, or two parts of the 1967 examination (Group II). A questionnaire-opinionnaire was used to gather the necessary information.

Pearson product-moment correlation coefficients were established as follows:

1. between full-time educational pursuits of each secretarial group and success in passing various sections of the 1967 CPS test.
2. between full-time work experience of each secretarial group and success in passing various sections of the 1967 CPS examination.
3. between full-time education and full-time work experience of all secretarial personnel.[18]

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[16]George F. Montgomery, A Study of Selected Determinants Contributing to the Professional Certification of Secretarial Personnel, Doctoral Dissertation, University of North Dakota, 1969.

[17]Ibid., p. 1.

[18]Ibid., p. 43.

None of the correlation coefficients were significant at the .05 level. A slightly larger percentage of noncertified secretaries attended vocational or technical schools, whereas a larger percentage of CPSs attended business colleges, colleges or universities, and graduate schools. The average CPS had 1.3 years of full-time post-secondary education while the average noncertified secretary had only .85 of a year of full-time post-secondary education.

College degrees were held by 20.86 percent of the CPSs but by only 10.92 percent of the non-certified secretaries. The two most frequently selected college majors were secretarial science and business education. Secretarial science was the major for 4.45 percent of the CPSs and 3.63 percent of the noncertified secretaries. Business education was the major for 4 percent of the CPSs and 1.22 percent of the noncertified secretaries. Business administration, English, and education were each the minor field for 1.33 percent of the CPSs. English was the minor field for 1.82 percent of the noncertified secretaries, and education was the minor field for 1.21 percent of the noncertified secretaries.

The four post-secondary courses taken most frequently by CPSs were business law, elementary accounting, shorthand and transcription, and economics. Noncertified secretaries most frequently completed business law, shorthand and transcription, elementary accounting, and business English.

CPSs gave ratings of "very valuable" to courses as follows: business law, 45 percent; elementary accounting, 91 percent; shorthand and transcription, 38.22 percent; and economics, 28.44

percent. They gave "valuable" ratings as follows: economics, 16 percent; office machines, 13.33 percent; and business English, 12 percent. Other courses considered to be valuable or very valuable by CPSs were business psychology, business administration, business math, and executive secretaryship.

Noncertified secretaries gave ratings of "very valuable" as follows: business law, 38 percent; shorthand and transcription, 36.36 percent; typewriting, 26.67 percent; and elementary accounting, 26.06 percent. They gave ratings of "valuable" as follows: elementary accounting, 16.67 percent; business English, 15.15 percent; and business law and economics, each 13.94 percent.

Full-time work experience was divided into three categories: clerk, stenographer, and executive secretary or administrative assistant. Montgomery reported work experience for secretaries:

> The majority of secretaries did not have any work experience on the clerical level. Slightly more than half of the secretarial personnel in this study had stenographic work experience. Nearly all of the secretaries had full-time work experience on the executive secretary or administrative assistant level.[19]

Two other areas of work experience indicated by certified secretaries were as teachers or legal secretaries. Other areas of work experience indicated by noncertified secretaries were as accountants or teachers. Certified secretaries reported having worked with their present firms as follows: less than 1 year to 5 years, 43.56 percent; 6 to 10 years, 23.11 percent; and 11 to 15 years, 18.22 percent. Noncertified secretaries reported having worked with their present firms as follows: less than 1 year to 5 years, 35.15 percent;

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[19]Ibid., p. 68.

6 to 10 years, 30.91 percent; and 11 to 15 years, 16.97 percent. The largest number of secretaries in each group had been employed for less than 6 years with their present firms.

Of the CPSs, 28.44 percent worked in offices with over 100 employees; 25.78 percent, with 1-5 employees; 10.67 percent, with 6-10 employees; and 9.78 percent, with 21-50 and 51-100 employees. Of the noncertified secretaries, 24.85 percent worked in offices with over 100 employees; 23.03 percent with 1-5 employees; 16.97 percent with 21-50 employees; 10.91 percent, with 6-10 employees; and 9.09 percent, with 51-100 employees. Most secretaries in both groups worked in offices with over 15 office workers.

Secretaries were asked to evaluate the items they used for review for the examination. The majority of the candidates did not take any formal review courses; but of those taking the courses, the comments were generally along the lines that the courses were helpful, but that many courses needed to be longer.

Books chosen from the CPS bibliography were used and received both negative and positive ratings. Though there were comments saying that the books used were helpful, there were also comments indicating that many of the books were outdated. Other methods of study included home study, use of the Questions and Answers articles from the SECRETARY, "team" reviews with friends, and the use of sample tests.

Montgomery reported that NSA-sponsored classes on the local study group level were ranked as either the first or second most frequently used means of preparing for all sections of the examination.[20]

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[20]Ibid., p. 163.

Comments indicated that the courses were helpful because of such things as professional teachers or quizzes similar to the test sections (i.e. length of time involved). Negative comments were that the meetings can become "coffee klatches" if care is not taken to avoid that problem and that for some sections (i.e. accounting and business law) more formal courses were needed.

On the basis of his findings, Montgomery rejected the research hypothesis that

> there were significant differences in the basic educational background, full-time work experience, and study habits of secretaries who were awarded the Certified Professional Secretary certificate in 1967 and secretaries who successfully completed none, one, or two of the six sections of the examination.[21]

Based on the findings of this study, Montgomery made the following recommendations:

1. That the CPS bibliography be revised and programmed texts and review books be included.

2. That secretarial programs incorporate courses in elementary accounting, business communications, business law, business organization and control, consumer behavior, data processing, economics, income tax and payroll accounting, and marketing as a minimum requirement.

3. That stenographic and secretarial students be given proper orientation in their classes about professional organizations and professional magazines that are available to them.

4. That candidates for certification who do not have formal coursework in these areas (business law, business administration, and secretarial accounting) pursue these subjects on the post-secondary level and obtain collegiate credit for their endeavors.[22]

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[21] Ibid., p. 181.

[22] Ibid., pp. 207-209.

LaBarre[23]

James Edward LaBarre completed a dissertation at the University of North Dakota in 1974 for the purpose of determining the relationship of selected personal and academic factors to candidates' performance on the 1973 CPS examination and to create prediction equations for future use.

LaBarre selected 1,350 possible participants for the study from the United States candidates taking the CPS examination in 1973 for the first time. As a result of the number of usable CPS Candidate Information Profiles (used for collecting data necessary for the study) returned, LaBarre's analysis was limited to 1,014 candidates.

Factors for inclusion in the formation of a multiple regression analysis were based on the performance of a Pearson Correlation Analysis on 106 predictor variables from the CPS Candidate Information Profiles. Those variables with a .01 significant relationship were used to form the multiple regression analysis for the creation of prediction equations.

Having identified the independent variables considered for inclusion in the study, LaBarre used an option of the Statistical Package for Social Sciences to establish the frequency distribution, relative percentage, mean, and standard deviation for each variable:

> Fourteen additional statistical analyses utilizing the Pearson Product Moment Correlation option and the stepwise multiple regression option of the Statistical Package for Social Sciences were completed for the purpose of determining the relationship

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[23]James Edward LaBarre, The Relationship of Selected Personal and Academic Factors to Predictability of Performance on the Certified Professional Secretary Examination, Doctoral Dissertation, University of North Dakota, 1974.

of the independent variables to candidates' performance on each of the six parts and on the CPS examination as a whole.[24]

The 38 independent variables finally selected for inclusion in the regression analysis, in their order of entry into the equation, were:

High school grade point average
Collegiate accounting
High school business arithmetic
Hours of informal study for Part III
Collegiate marketing
Collegiate grade point average
Collegiate business mathematics
Highest educational level achieved
Number of part-time secretarial positions
Collegiate management
Collegiate business communications
Non-collegiate shorthand and transcription
Collegiate economics
Hours of informal study for Part II
High school English grade point average
Attended four-year college or university
Attended more than one of the following: vocational-technical school, business college, junior college, four-year college or university
Attended Vocational-Technical School
Attended Business College
Attended Junior College
Majored in Marketing,
Business Administration,
Education areas other than business,
Management,
Secretarial Science,
Business Education,
Economics,
Accounting, or
Office Administration
Minored in Accounting,
Secretarial Science,
Business Education,
Business Administration,
Marketing,
Economics,
Management,

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[24]Ibid., p. 51.

Office Administration, or
Education areas other than business[25]

LaBarre's findings were as follows:

1. The significant variables for predicting performance on Part I of the CPS examination were high school office practice, high school grade point average, non-collegiate business law, collegiate business law, collegiate psychology, and years elapsed since full-time attendance in school.

2. The significant variables for predicting performance on the Business and Public Policy part of the CPS examination were high school grade point average, high school general business, collegiate grade point average, and collegiate accounting.

3. High school grade point average, high school office practice, non-collegiate grade point average, high school business English, and collegiate grade point average were the predictor variables accounting for a large percentage of the criterion variance on Part III.

4. The number of courses completed in collegiate accounting, high school grade point average, and number of semesters of high school general business completed were the significant variables for predicting performance on Part IV.

5. The significant variables included in the prediction equation for Part V were: high school grade point average, attendance at a formal review session for Part I, age, collegiate accounting, hours of informal preparation for Part II, years elapsed since full-time attendance in school, and non-collegiate typewriting.

6. High school grade point average, educational level completed, full-time secretarial positions held, attendance at a formal review session for Part I, number of semesters of high school office practice completed, and collegiate grade point average were the significant variables for predicting performance on Part VI.

7. The significant variables for the prediction of certification/noncertification were high school grade point average, collegiate accounting, high school business arithmetic, hours of informal study for Part III, collegiate

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[25]Ibid., pp. 137-138.

marketing, collegiate grade point average, collegiate business mathematics, and educational level completed.[26]

Some of the conclusions LaBarre drew after analyzing the data were as follows:

1. There was a significant relationship between personal and academic factors and predictability of performance on all parts of the CPS examination.

2. There was a significant relationship between personal and academic factors and predictability of certification/non-certification on the CPS examination.

3. High school grade point average was the best single predictor in the study.

4. College grade point average was a significant predictor.

5. Current employment status was not a significant predictor.

6. Amount of secretarial experience did not directly influence performance.

7. Educational level did not have a significant influence on candidate performance for Parts I through V.

8. Types of post-secondary institutions attended or major or minor areas of study had little influence on predictability of success.

9. There was a direct relationship between success on Part II and attendance at formal review sessions for Part II and informal study time for Part II.

10. High school courses contributed little to predictability of performance.

11. Collegiate courses contributed more to predictability of success than either high school courses or non-collegiate courses.

12. CPSs had a mean age of one year less than those candidates not receiving certification.

13. Intelligence quotient, emotional level, innate ability to take paper and pencil tests, and ability to work under pressure, and types of tasks completed on the job

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[26]Ibid., pp. 142-145.

(variables not considered in this study) might prove to be valuable predictors of performance.[27]

Snodgrass[28]

Kathryn Keeble Snodgrass completed a master's thesis at The University of Tennessee with the purpose of determining the relationship of selected educational background and work experience background factors to success of new candidates on the 1978 Certified Professional Secretary examination. The factors she studied were number of years of formal education (including high school and post high school education) and the number of years of work experience.

The information for this study was obtained from the Institute for Certifying Secretaries, and no personal contact with the candidates was necessary. The population for the study included 2,074 secretaries with verified experience who were taking the examination for the first time. From this number, 57 were eliminated because they took fewer than six parts of the examination leaving a total of 2,017 cases to be used for the study.

Analysis of variance and multiple regression techniques were used to determine the relationships among formal education, work experience, and the number of sections passed by each candidate. The relationships among formal education, work experience, and the raw score on each section by each candidate were determined.

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[27]Ibid., pp. 147-155.

[28]Kathryn K. Snodgrass, The Relationship of Selected Academic and Work Experience Background Factors to Success of New Candidates on the 1978 Certified Professional Secretary Examination, Master's Thesis, The University of Tennessee, 1979.

The population was divided into seven groups composed of those candidates who passed zero, one, two, three, four, five, or six parts of the examination. She then calculated mean scores for each part for each group and F-ratios to detect differences among the mean scores of the seven groups and used the Scheffe method to determine exactly where the differences existed.

One-way analysis of variance was used to compare differences in the levels of formal education and work experience of candidates in the top, middle, or bottom third of those failing each section of the examination. The population was divided into five groups based on whether the candidate's level of education was less than high school diploma, high school diploma, one year of college, two-three years of college, or bachelor's or master's degree. Snodgrass then calculated the mean number of sections passed and F-ratios to detect differences in the mean number of sections passed by each group and used the Scheffe method to determine exactly where the differences existed. She also calculated the mean score on each section for each group and F-ratios to detect differences in the mean scores on each part among the five groups and used the Scheffe method to determine exactly where the differences existed.

Snodgrass's final analysis was the computation of the number passing each section within each educational division and the application of the chi-square test to compare the five groups based on whether a candidate did or did not pass an individual section. Snodgrass's major findings were as follows:

1. There was a significant relationship between the level of education and the number of sections passed though the relationship was weak, as indicated by the coefficient of determination.

2. There was no relationship between the number of years of work experience and the number of sections passed.

3. There was a significant relationship between the joint number of years of education and work experience and the number of sections passed. Again, however, the coefficient indicated only a weak relationship.

4. There was a significant relationship between the level of education and the raw score on each of the six parts. The coefficients, however, were small enough to cause regression equations for predicting scores to be impractical.

5. There was no relationship between the number of years of work experience and raw scores on the first four parts of the examination. There was, however, a significant relationship between this factor and the raw scores on Parts V and VI. Once again, the coefficients were small enough to cause regression equations for predicting scores to be impractical.

6. On all six parts of the examination, there was a significant relationship between the raw score and the number of years of education and experience considered jointly. Educational level alone, however, was as good a predictor as the combined level of education and experience on Part I and was actually a better predictor for Parts II and VI. On parts III, IV, and V, education alone was not as good a predictor as was the combination of the number of years of education and experience.

7. For all six parts, a significant difference was found among mean scores of seven groups of candidates passing from zero to six parts of the examination. Candidates were organized into seven groups according to the number of parts passed.

8. There was a significant difference in the educational levels of those candidates scoring in the top, middle, or bottom third of those not passing on every part except Part V.

9. There was no significant difference in the years of work experience for those candidates scoring in the top, middle, or bottom third of those not passing for each section of the examination.

10. Though there was a significant difference among the mean number of sections passed based on the levels of education,

there was no significant difference among those candidates grouped into the Less Than High School Diploma through Three Years of College levels.

11. There was a significant difference between the mean score of each educational group compared with every other educational group on all six parts of the examination.

12. There was a significant difference among the educational level groups based on whether they passed or did not pass Parts I, III, IV, and VI, though no such relationship existed based on Parts II and V.

13. There was a high correlation (.71) between the scores on Parts I and III.[29]

From these findings, Snodgrass drew the following two conclusions:

1. Amount of formal education was related to performance on the CPS examination. Amount of education seemed to have the least effect on Part V, Communications and Decision Making, where judgmental decisions are required along with the production of typewritten work.

2. Amount of work experience was not related to performance on Parts I, II, III, IV, and VI of the CPS examination. This finding reflected the academic orientation of most of the examination. Amount of work experience was related to performance on Part V, Communications and Decision Making.[30]

Headrick[31]

Darlene Headrick completed a master's thesis at The University of Tennessee in 1979 to determine the relationship of the employers' ratings of secretaries and type of organization employing the secretary

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[29]Ibid., pp. 99-105.

[30]Ibid., p. 106.

[31]Darlene Headrick, A Study of the Relationship of the Employers' Ratings of the Secretary and the Type of Organization Employing the Secretary to the Performance on the CPS Examination, Amount of Education and Amount of Work Experience, Master's Thesis, The University of Tennessee, 1979.

to the number of sections passed on the 1978 CPS examination, raw scores on each part, amount of formal education, and amount of work experience.

The information for this study was obtained from the files originally obtained from the Institute for Certifying Secretaries by Kathryn Snodgrass for use in her study in 1979. The population included only those secretaries taking the 1978 examination who had at least two years of full-time employment in one type of organization. The sample of 418 secretaries was selected by type of organization for which the secretary was employed at least two years. Secretaries with at least two years of experience in more than one type of organization were not used in the study. The types of organizations included banking, education, government, insurance, legal, manufacturing, and medical.

The relationships among the variables were determined through the use of Pearson product-moment correlation coefficients and analysis of variance. A .05 level of significance was used. Headrick's major findings were as follows:

1. There was a significant relationship between the employers' ratings of the secretary and the number of sections passed though the relationship was weak, as indicated by the coefficients of determination.

2. There was a weak significant relationship between the employers' ratings and the raw score on each of the six parts.

3. There was no relationship between the employers' ratings and the type of organization employing the secretary; the number of sections passed and the type of organization employing the secretary; the employers' ratings and the number of years of formal education; and the employers' ratings and the number of years of work experience.

4. There was no relationship between the raw scores on Parts II, III, V, and VI and the type of organization employing the secretary. There was however, a significant relationship between the raw scores on Parts I and IV and the type of organization. On Part I government secretaries had the lowest scores, and educational secretaries had the highest scores. On Part IV government and medical secretaries had the lowest scores, and banking secretaries had the highest scores.[22]

From these findings, Headrick drew the following two conclusions:

1. Government secretaries should pay attention to studying for Part I, since they had the lowest average scores on this part.

2. Medical and government secretaries should be concerned about studying for Part IV because they had low average scores on this part.[23]

C. SUMMARY

Five studies were summarized in this chapter that found relationships between various factors in the background and preparation of CPS candidates and their performance on the CPS examination. One study was summarized that involved detailed investigation of secretarial job descriptions. These studies furnish background information for the present study, which determined the relationship of certain background factors in education and experience to success in completing the 1978 CPS examination.

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[22] Ibid., pp. 37-38.

[23] Ibid., p. 39.

CHAPTER III

METHODS OF PROCEDURE

The information for the current study was taken directly from the application forms and employer's evaluation forms completed by and for the secretaries who applied to take the CPS examination during 1978. No personal contact with the candidates or their employers was necessary.

The data collected from the evaluation forms were quantitative data. The employers indicated for several secretarial duties whether the secretary in question performed the duty "frequently," "occasionally," or "never" and then evaluated the secretary with an overall rating of "outstanding," "excellent," "good," "fair," or "poor."

A. SELECTION OF DUTIES

The first step was the selection of duties for which data should be collected. After a review of the study in which Petree[1] developed secretarial-stenographic job descriptions, the selection of duties was based on a comparison of the secretarial job descriptions of several large companies. Only companies large enough to supply job descriptions for three separate levels of secretaries were used for the study. Ten companies with offices in Tennessee or Virginia supplied usable job descriptions.

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[1]Helen C. Petree, Development of Modal Job Descriptions for Secretarial-Stenographic Jobs, Master's Thesis, The University of Tennessee, 1966.

The companies that participated in the study, along with the titles shown on the descriptions used from those companies, include:

1. A statewide banking institution: Secretary--Grade 14, Secretary--Grade 13, and Secretary--Grade 12.
2. A national iron foundry: Executive Secretary, Senior Secretary, and Secretary.
3. An international producer of electric appliances: Secretary--Grade 9, Secretary--Grade 7, and Secretary--Grade 5.
4. A government agency for energy production: Secretary--Grade SB 6, Secretary--Grade SB 5, Secretary--Grade SB 4.
5. A hospital: Personnel Secretary, General Secretary, and Secretary.
6. A state university: Administrative Secretary, Principal Secretary, and Senior Secretary.
7. An international producer of crushed stone: Executive Secretary, Secretary--Engineering, Secretary--Office Services.
8. An international producer of aluminum products: Administrative Secretary, Administrative Assistant--Planning/Transportation, and Administrative Assistant--Product Sales.
9. A national nuclear engineering firm: Secretary--Executive, Secretary, and Secretary--Jr.
10. A national trucking firm: Executive Secretary I, Secretary I, and Secretary II.

Only the duties listed on the employer's evaluation form were considered for inclusion since information about candidate performance of other duties was not readily available. For this reason, only the duties included on the evaluation forms were analyzed while reviewing the job descriptions. The number of companies requiring that these duties be performed at various levels is indicated on Table 1.

After levels at which certain duties were performed in ten companies were identified, two bases were used to determine which duties were to be included in the study. The first criterion for the inclusion of certain duties in the study was that the duty was reported in at least 50 percent of the higher level job descriptions. The second criterion was that the duty occurred at least twice as frequently in the highest-level descriptions as in the lowest-level descriptions.

Based on the comparison of secretarial job descriptions, the duties of taking and transcribing dictation, transcribing from voice recording machines, filing, processing office mail, making and maintaining records of appointments, assisting visitors, performing routine duties with little or no supervision, preparing publication releases, preparing reports from rough data, and maintaining office records were excluded from the study because they were not identified twice as often on higher-level descriptions as on lower-level descriptions. The duties of transcribing from voice recording machines and duplicating and/or reproducing materials were excluded from the study because they did not occur on at least 50 percent of the highest-level job descriptions.

TABLE 1

NUMBER OF COMPANIES REQUIRING PERFORMANCE OF VARIOUS DUTIES AT DIFFERENT SECRETARIAL LEVELS AS LISTED ON THE EMPLOYER'S EVALUATION FORM

Duty	Highest	Middle	Lowest
A*	7	9	8
B	3	3	3
C	9	6	5
D	9	5	8
E	8	5	5
F	8	6	3
G	5	5	3
H	0	0	0
I	8	7	3
J	0	0	0
K	8	5	3
L	6	5	3
M	8	3	7
N	0	0	0
O	5	2	2
P	9	4	4
Q	3	2	1
R	9	6	6
S	8	3	4

*Descriptors of duties:
A--take dictation and transcribe
B--transcribe from voice recording machine
C--file (personal and/or confidential)
D--process office mail
E--make and maintain record of appointments
F--originate written communications
G--assist visitors
H--perform routine duties with little or no supervision
I--make travel arrangements
J--prepare publication releases
K--gather research material for reports and/or speeches
L--prepare reports from rough data
M--maintain office records
N--assist with or prepare employer's income tax return
O--supervise other employees
P--prepare for meetings, keep notes and minutes at meetings
Q--duplicate and/or reproduce materials
R--receive and place telephone calls
S--obtain and supply information to other offices

The duties of originating written communications, making travel arrangements, gathering research material for reports and/or speeches, supervising other employees, preparing for meetings and keeping notes and minutes at meetings, and obtaining information from and supplying information to other offices were included in the study because they were performed by the highest-level secretaries of at least 50 percent of the companies supplying descriptions (see Table 2) and they were performed by at least twice as many upper-level secretaries as lower-level secretaries (see Table 1). The duty of receiving and placing telephone calls was also selected for inclusion even though it did not meet the requirement that it be performed by twice as many higher-level secretaries as lower-level secretaries. This decision was based on the fact that among the 90 percent of the higher-level secretaries performing this duty, the job tasks appeared to be more difficult than among the 60 percent of the lower-level secretaries performing the duty. The higher-level secretaries had telephone task descriptions such as these:

1. Answer phones, place calls throughout the world, take and deliver messages.
2. Monitor telephone conversations, record pertinent information, and on own initiative follow through on matters arising out of such conversation.
3. Handle long distance telephone calls.
4. Answer telephones and interrupt meetings to relay messages when appropriate.

TABLE 2

DUTIES PERFORMED BY HIGH-RANKING SECRETARIES

Companies	A*	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	X		X	X	X	X									X	X		X	X
2			X	X	X	X			X		X		X		X	X		X	X
3	X		X	X	X				X				X			X		X	
4	X		X	X	X	X	X		X		X	X			X	X		X	X
5			X		X	X	X				X	X	X			X	X	X	X
6				X	X	X			X		X	X	X		X	X		X	X
7	X	X	X	X					X		X	X	X			X		X	
8	X		X	X	X	X	X		X		X	X	X			X	X	X	X
9	X		X	X	X	X	X		X		X	X	X		X	X			X
10	X	X	X	X		X	X		X		X						X	X	X

*See descriptors of duties on Table 1.

†Statements supporting duties performed by high-ranking secretaries are shown in Appendix C.

5. Screen phone calls, intercept and route problems and complaints to appropriate personnel.

The lower-level secretaries had telephone task descriptions such as these:

1. Answer multi-line telephone calls and place calls.
2. Receive telephone and personal callers to the office.
3. Answer telephone, take messages, and reply to questions in accordance with general instructions.
4. No telephone responsibilities stated.
5. Answer telephones and take messages.

The duties selected are further identified as upper-level duties through related research. Though some of the duties selected may be performed on a somewhat routine basis, all of them fall into the area of secretarial responsibility identified as "assigned tasks."[2] The identification of these duties as assigned tasks clearly separates them from the more routine, almost clerical types of duties which may be performed by lower-level secretaries.

The Tennessee Department of Education, Division of Vocational-Technical Education, identified difficulty levels for several of the duties selected for the study. They identified the duty of taking and transcribing notes for meetings in the highest level of dictating and transcribing tasks, and arranging for meetings was identified in the third through fifth (highest) levels of meeting and working with people tasks. Telephone responsibilities were identified as the

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[2]J. Marshall Hanna, Estelle L. Popham, and Rita Sloan Tilton, Secretarial Procedures and Administration, 7th Edition, Cincinnati: South-Western Publishing Company, 1978, p. 30.

second most complex level among the telephoning and communicating tasks, as was the duty of originating written communications. Responsibility for locating and assembling information for reports was identified in the second and third (highest) levels of clerical tasks. The duty of supervising others was identified in the fourth and fifth (highest) levels of meeting and working with people tasks. Though obtaining and supplying information and making travel arrangements were not specifically mentioned, related items, coordinating with other personnel and making arrangements for guests, were included in the third through fifth (highest) levels of meeting and working with people tasks.[3]

B. PROCEDURE

The following steps were taken in this study:

1. The sample used for this study was taken from the sample used by Kathryn Snodgrass in her 1979 study. In 1978, 2,074 experienced secretaries were approved to take the CPS examination. From that number, Snodgrass excluded 57 who took fewer than all six parts of the examination, leaving a population of 2,017 first-time candidates for the CPS examination. Snodgrass then divided the population into seven groups based on whether they successfully completed zero, one, two, three, four, five, or six parts

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[3]Charles Reigel, Editor, Education for Office Careers, An Articulated Curriculum Guide for Junior High Schools, Secondary Schools, Area Vocational-Technical Schools, and Community Colleges, Tennessee Department of Education, Division of Vocational-Technical Education, Nashville, Tennessee, 1971-72.

of the examination. This study involves two groups: an upper group comprised of the groups Snodgrass identified as having passed five or six parts of the examination and a lower group comprised of the groups Snodgrass identified as having passed one or no parts of the examination.

2. A sample of 200 candidates was then selected from the groups identified. A sample of 100 successful candidates was selected by drawing 100 forms from the top of the stack of 148 available application forms of the upper group. A sample of 100 unsuccessful candidates was then selected by drawing 100 forms from the top of the stack of 206 available application forms of the lower group. The distribution of the 2,299 candidates who passed zero to six parts on the 1978 examination is shown in Table 3. This table also indicates the number of application forms available for the most successful and least successful groups from which the sample for the current study was drawn.

3. The frequencies with which the selected duties were performed were taken from the employers' evaluation forms for each candidate. On the evaluation forms employers had indicated whether each task was done "frequently," "occasionally," or "never." To facilitate comparisons of candidates according to the frequency with which they performed the duties, each of the three terms was assigned a code to indicate the frequency with which the duty was performed. "Never" was the only term of the three with a

TABLE 3

SELECTION OF SAMPLE FROM 1978 CPS CANDIDATES

Number of Parts Passed	Number	Number of Applications*	Number in Sample
6	188	57	33
5	266	91	67
4	274		
3	320		
2	346		
1	437	95	45
0	468	111	55
Totals	2,299	354	200

*Represents those that were available from the Kansas City Office.

very concrete meaning and was assigned a value of 0 (zero). The author assumed "frequently" to mean more often than "occasionally" and, in moving from "never" upward, assigned a code value of 1 (one) to the term "occasionally" and a code value of 2 (two) to the term "frequently."

4. After codes were assigned, the average task performance frequency for the individual candidates and for the upper and lower groups was determined for each of the duties. (See Appendix A for data for each candidate.) For example, on one duty candidate Number 1 received a rating of "frequently" from one employer and "occasionally" from the other employer who rated her. The "frequently" rating was averaged into her performance frequency at a value of 2, and the "occasionally" rating was averaged in at a value of 1. The average score of 1 and 2 is 1.5, so her average performance frequency on that duty was 1.5. To determine the average task performance frequency for the entire upper or lower group, the average task performance frequencies of all candidates were added and the total divided by 100 (the total number in the group). The duties for which task performance frequencies were determined include:

   a. originating written communications,

   b. making travel arrangements,

   c. gathering research material for reports and/or speeches,

   d. supervising other employees,

e. preparing for meetings and keeping notes and minutes at meetings,

f. receiving and placing telephone calls, and

g. obtaining information from and supplying information to other offices.

5. The data concerning the employers' overall ratings of the candidates were also taken from the employers' evaluation forms for each candidate. On the evaluation forms employers rated the secretaries as "outstanding," "excellent," "good," "fair," or "poor." To facilitate comparison of candidates according to the employers' overall ratings, a numerical value was assigned to each term. The term "outstanding" received a coded value of 5 (five); "excellent," 4 (four); "good," 3 (three); "fair," 2 (two); and "poor," 1 (one). Having assigned the specified codes, the author determined the average overall rating for each candidate and for each of the two groups.

6. The data concerning the educational levels of the secretaries were obtained from the candidates' application forms and stated in terms of the number of years of formal post-secondary education.

7. T-tests were used to determine the differences among education and experience background factors and success on the examination. Factors used as background factors were measured by the frequency with which these duties were performed by secretaries:

a. originating written communications,

b. making travel arrangements,

c. gathering research materials for reports and/or speeches,

d. supervising other employees,

e. preparing for meetings and keeping notes and minutes at meetings,

f. receiving and placing telephone calls,

g. obtaining information from and supplying information to other offices.

In addition, t-tests were used to determine whether significant differences existed between successful completion of the examination and two additional factors: (a) the employers' overall ratings of the secretary and (b) the educational level of the secretary.

CHAPTER IV

RESULTS OF THE STUDY

The results obtained from this study were based on data obtained from the application forms and employer's evaluation forms completed by and for 200 secretaries who took the CPS examination for the first time in 1978. The candidates selected as a sample for the study were representative of the most successful and least successful candidates for the 1978 CPS examination. The candidates were compared according to the following factors:

1. Frequency with which the duty of originating written communications was performed.
2. Frequency with which the duty of making travel arrangements was performed.
3. Frequency with which the duty of gathering research materials for reports and/or speeches was performed.
4. Frequency with which the duty of supervising other employees was performed.
5. Frequency with which the duty of preparing for meetings and keeping notes and minutes at meetings was performed.
6. Frequency with which the duty of receiving and placing telephone calls was performed.
7. Frequency with which the duty of obtaining information from and supplying information to other offices was performed.
8. The employers' overall ratings of the secretary.
9. The level of education.

The relationships among the factors identified for inclusion in the study and success on the examination were determined by t-tests; results of those tests are listed in Table 4. The steps used in calculating t-scores are shown in Appendix B.

Hypothesis 1: There is no relationship between successful completion of the examination and the frequency with which the duty of originating written communications was performed.

The calculation of the average task frequency indicated that the upper group performed the originating written communications task with a coded frequency of 1.43 and the lower group with a frequency of 1.36. Hypothesis 1 could not be rejected at the .05 level of significance (t-value of 1.167 as compared with a needed t-value of 1.97). There was, therefore, no significant relationship between successful completion of the examination and the frequency with which the duty of originating written communications was performed.

Hypothesis 2: There is no relationship between successful completion of the examination and the frequency with which the duty of making travel arrangements was performed.

The average coded frequency of performance of the duty of making travel arrangements was 1.38 for the upper group and 1.32 for the lower group. Hypothesis 2 could not be rejected at the .05 level of significance (t-value of 0.800 as compared with a needed t-value of 1.97). No significant relationship existed between successful

TABLE 4

T-TESTS ON CERTAIN BACKGROUND FACTORS OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES FOR 1978 CPS EXAMINATION

Factors	Average Task Frequency				
	High Group		Low Group		
	Mean	Std. Dev.	Mean	Std. Dev.	t
Originate written communications	1.43	0.39	1.36	0.45	1.167
Make travel arrangements	1.38	0.56	1.32	0.50	0.800
Gather research materials for reports and/or speeches	0.95	0.54	0.81	0.50	1.918
Supervise other employees	0.84	0.54	0.65	0.60	2.346*
Prepare for meetings and keep notes and minutes at meetings	1.13	0.52	1.02	0.58	1.410
Receive and place telephone calls	1.97	0.12	1.91	0.23	2.308*
Obtain information from and supply information to other offices	1.73	0.33	1.66	0.37	1.400
Employers' overall ratings	4.50	0.41	4.24	0.56	0.375
Level of education	1.00	1.35	0.64	1.19	2.000*

*Significant at the .05 level; 1.972 needed for significance.

completion of the examination and the frequency with which the duty of making travel arrangements was performed.

Hypothesis 3: There is no relationship between successful completion of the examination and the frequency with which the duty of gathering research materials for reports and/or speeches was performed.

The upper group performed the duty of gathering research materials with a coded frequency of 0.95 and the lower group with a frequency of 0.81. Rejection of Hypothesis 3 was not possible at the .05 level of significance (t-value of 1.918 as compared with a needed t-value of 1.97). The relationship between successful completion of the examination and the frequency with which the duty of gathering research materials for reports and/or speeches was performed was found not to be significant.

Hypothesis 4: There is no relationship between successful completion of the examination and the frequency with which the duty of supervising other employees was performed.

Average task performance frequencies indicated that the upper group performed the duty of supervising other employees with a coded frequency of 0.89 and the lower group with a frequency of 0.65. Hypothesis 4 was rejected at the .05 level of significance (t-value of 2.346 as compared with a needed t-value of 1.97). There was, therefore, a significant relationship between successful completion of the examination and the frequency with which the duty of supervising other employees was performed.

Hypothesis 5: There is no relationship between successful completion of the examination and the frequency with which the duty of preparing for meetings and keeping notes and minutes at meetings was performed.

The upper and lower groups performed the duty of preparing for meetings and keeping notes and minutes at meetings with a coded frequency of 1.13 and 1.02, respectively. The relationship between successful completion of the examination and the frequency with which the duty of preparing for meetings and keeping notes and minutes at meetings was performed was not significant at the .05 level (t-value of 1.410 as compared with a needed t-value of 1.97). Hypothesis 5 was, therefore, not rejected.

Hypothesis 6: There is no relationship between successful completion of the examination and the frequency with which the duty of receiving and placing telephone calls was performed.

The upper group performed the duty of receiving and placing telephone calls with a coded frequency of 1.97 and the lower group with a frequency of 1.91 according to the calculation of the average task performance frequencies. A t-value of 2.308 caused rejection of Hypothesis 6 at the .05 level of significance (a needed t-value of 1.97). There was a significant relationship between successful completion of the examination and the frequency with which the duty of receiving and placing telephone calls was performed.

Hypothesis 7: There is no relationship between successful completion of the examination and the frequency with

which the duty of obtaining information from and supplying information to other offices was performed.

Coded frequencies for the duty of obtaining information from and supplying information to other offices were 1.73 and 1.66 for the upper and lower groups, respectively. Hypothesis 7 was not rejected at the .05 level of significance (t-value of 1.400 as compared with a needed t-value of 1.97). No significant relationship existed between successful completion of the examination and the frequency with which the duty of obtaining information from and supplying information to other offices was performed.

Hypothesis 8: There is no relationship between successful completion of the examination and the employers' overall ratings of the secretary.

The calculation of the average employers' overall ratings indicated that the upper group was rated at the coded level of 4.50 and the lower group at the level of 4.24. A t-value of 0.375 prevented rejection of Hypothesis 8 at the .05 level of significance (needed t-value of 1.97). There was, therefore, no significant relationship between successful completion of the examination and the employers' overall ratings of the secretary.

Hypothesis 9: There is no relationship between successful completion of the examination and the level of education.

The average level of education for the upper group was one (1) year of formal post-secondary education, and the level for the lower group was .64 of a year of formal post-secondary education. The

percentage of successful and unsuccessful candidates having completed various levels of education is shown on Table 5. Hypothesis 9 was rejected at the .05 level of significance (t-value of 2.000 as compared with a needed t-value of 1.97). There was, therefore, a significant relationship between successful completion of the examination and the level of education.

TABLE 5

EDUCATIONAL LEVEL DISTRIBUTION OF SUCCESSFUL AND UNSUCCESSFUL SAMPLE GROUPS

Years of Post-Secondary Education Completed*	Percentage of Successful Group	Percentage of Unsuccessful Group
0	55	73
1	15	11
2	18	7
3	0	2
4	12	6
5	0	1

*Each level includes all candidates with less than the complete number of years shown in the next level.

CHAPTER V

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine the relationships among success on the 1978 CPS examination and certain background factors of new CPS candidates in 1978. The background factors included the frequency with which certain secretarial duties had been performed by the candidates, overall ratings of candidates by their past and present employers, and educational levels of the candidates. Successful and unsuccessful candidates were compared on those background factors. The major findings indicated here summarize the results of the tests of nine null hypotheses.

A. FINDINGS

As a result of this study, these findings are supported by analysis of the data. Nine questions were answered by the analysis.

1. Was there a relationship between success on the examination and the frequency with which the duty of originating written communications was performed?

No relationship was found between successful completion of the examination and the frequency with which the duty of originating written communications was performed.

2. Was there a relationship between success on the examination and the frequency with which the duty of making travel arrangements was performed?

Successful completion of the examination and the frequency with which the duty of making travel arrangements was performed were found not to be related.

3. Was there a relationship between success on the examination and the frequency with which the duty of gathering research material for reports and/or speeches was performed?

There was no relationship between successful completion of the examination and the frequency with which the duty of gathering research material for reports and/or speeches was performed.

4. Was there a relationship between success on the examination and the frequency with which the duty of supervising other employees was performed?

A relationship significant at the .05 level was found between successful completion of the examination and the frequency with which the duty of supervising other employees was performed.

5. Was there a relationship between success on the examination and the frequency with which the duty of preparing for meetings and keeping notes and minutes at meetings was performed?

No relationship was found between the frequency with which the duty of preparing for meetings and keeping notes and minutes at meetings was performed and successful completion of the examination.

6. Was there a relationship between success on the examination and the frequency with which the duty of receiving and placing telephone calls was performed?

A relationship significant at the .05 level was found between successful completion of the examination and the frequency with which the duty of receiving and placing telephone calls was performed.

7. Was there a relationship between success on the examination and the frequency with which the duty of obtaining information from and supplying information to other offices was performed?

No relationship was found between the frequency with which the duty of obtaining information from and supplying information to other offices was performed and success on the examination.

8. Was there a relationship between success on the examination and the employers' overall ratings of the secretary?

No relationship was found between successful completion of the examination and the employers' overall ratings of the secretary.

9. Was there a relationship between success on the examination and the number of years of formal post-secondary education?

A relationship significant at the .05 level was found between successful completion of the examination and the level of education.

B. CONCLUSIONS

The following conclusions are based on the findings of this study.

1. Since the performance of the duties of originating written communications, making travel arrangements, gathering research materials for reports and/or speeches, preparing for meetings and keeping notes and minutes at meetings, and

obtaining information from and supplying information to other offices, independent of other responsibilities, is not related to success on the CPS examination, these duties do not appear to be of any great benefit in helping secretaries prepare to take and pass the CPS examination. (Hypotheses 1, 2, 3, 5, and 7)

2. Though this study did not reveal why the duties of supervising other employees and placing and receiving telephone calls are valuable in preparing for the examination, one may conclude that the immediate direct contact with other people necessary for the performance of these duties creates a need for secretaries with these responsibilities to be constantly well-informed and efficient. (Hypotheses 4 and 6)
3. Only secretaries who took the examination were considered in this study, and the preliminary screening for admission may have resulted in only a select group of secretaries taking the examination. This may be why the employers' overall ratings of the secretaries involved in this study were not predictive of success on the examination. (Hypothesis 8)
4. Education is beneficial in preparing for the CPS examination. (Hypothesis 9)

C. RECOMMENDATIONS FOR FURTHER STUDY

The following recommendations for further study are made as a result of needs identified during research efforts for the current study.

1. Five of the items on the current Employer's Evaluation form were found not to be related to performance on the examination. Review of current job descriptions revealed that secretaries now perform many duties not included on the form. Additional research could determine which parts of the current form are effective in selecting successful candidates and items which should be added to the form to permit proper evaluation of candidates for the examination. This research could lead to revision of the Employer's Evaluation form and its adoption for use by the ICS.
2. Future research to determine differences between CPSs and noncertified secretaries should include secretaries whose applications to sit for the examination were denied.
3. A study should be done to determine whether secretaries with more educational training are assigned more varied or more difficult tasks.
4. A study should be done to determine which tasks currently comprise a secretary's duties.
5. Research should be done to create standard secretarial job descriptions for varied secretarial levels.

BIBLIOGRAPHY

BIBLIOGRAPHY

Capstone, Kansas City: Institute for Certifying Secretaries, 1980.

J. Marshall Hanna, Estelle L. Popham, and Esther Kihn Beamer, Secretarial Procedures and Administration, 7th Edition, Cincinnati; South-Western Publishing Company, 1978.

Mathilde Hardaway and Thomas B. Maier, Tests and Measurements in Business Education, Cincinnati: South-Western Publishing Company, 1952.

Darlene Headrick, A Study of the Relationship of the Employers' Ratings of the Secretary and the Type of Organization Employing the Secretary to the Performance on the CPS Examination, Amount of Education and Amount of Work Experience, Master's Thesis, The University of Tennessee, 1979.

Charles B. Hicks and Irene Place, Office Management, 2nd Edition, Boston: Allyn and Bacon, Inc., 1962.

Job Descriptions for Office Occupations, War Manpower Commission Division of Occupational Analysis, Washington: United States Government Printing Office, 1945.

James Edward LaBarre, The Relationship of Selected Personal and Academic Factors to Predictability of Performance on the Certified Professional Secretary Examination, Doctoral Dissertation, University of North Dakota, 1974.

Bonnie Allen Lockwood, A Study of the Characteristics and Duties of Certified Professional Secretaries, Doctoral Dissertation, University of Pittsburgh, 1954.

Mervin D. Lynch and David V. Huntsberger, Elements of Statistical Inference for Education and Psychology, Boston: Allyn and Bacon, 1976.

William Mitchell, "The Certified Professional Secretary (CPS)," National Business Education Yearbook, XII, 1974.

George F. Montgomery, A Study of Selected Determinants Contributing to the Professional Certification of Secretarial Personnel, Doctoral Dissertation, University of North Dakota, 1969.

Helen C. Petree, Development of Modal Job Descriptions for Secretarial-Stenographic Jobs, Master's Thesis, The University of Tennessee, 1966.

Charles Reigel, Editor, Education for Office Careers, An Articulated Curriculum Guide for Junior High Schools, Secondary Schools, Area Vocational-Technical Schools, and Community Colleges, Tennessee Department of Education, Division of Vocational-Technical Education, Nashville, Tennessee, 1971-72.

Kathryn K. Snodgrass, The Relationship of Selected Academic and Work Experience Background Factors to Success of New Candidates on the 1978 Certified Professional Secretary Examination, Master's Thesis, The University of Tennessee, 1979.

Thomas R. Whelan, The Relative Importance of Secretarial Duties and Personal Traits, Doctoral Dissertation, University of North Dakota, 1975.

APPENDIXES

APPENDIX A

TABLE 6

AVERAGE RATINGS OF SUCCESSFUL CANDIDATES ON ITEMS INCLUDED IN THE STUDY

Candidates	1*	2	3	4	5	6	7	8	9
1	1.5	1.5	1.0	1.0	2.0	2.0	2.0	4.5	0.0
2	1.0	1.0	0.5	1.5	1.0	2.0	2.0	4.5	0.0
3	1.7	2.0	1.7	1.0	2.0	2.0	2.0	4.3	0.0
4	1.5	1.0	1.0	0.8	0.5	2.0	1.3	4.5	2.0
5	1.5	1.5	1.0	1.5	1.5	2.0	1.5	5.0	0.0
6	1.5	0.5	0.0	1.0	0.0	2.0	1.5	4.5	2.0
7	1.6	1.7	1.0	0.1	0.7	2.0	1.6	4.3	0.0
8	1.0	2.0	1.0	1.0	1.0	2.0	1.0	5.0	2.0
9	1.2	0.2	0.8	0.0	1.4	2.0	2.0	4.0	4.0
10	2.0	1.5	0.5	0.5	0.5	2.0	1.0	5.0	2.0
11	1.4	1.4	1.0	0.9	1.2	1.9	1.5	4.7	0.0
12	2.0	2.0	1.0	1.0	0.5	2.0	1.5	5.0	4.0
13	1.3	1.7	1.0	0.3	0.7	2.0	1.7	4.3	2.0
14	1.7	1.0	1.0	1.0	1.3	2.0	2.0	4.7	2.0
15	2.0	2.0	2.0	0.0	2.0	2.0	2.0	5.0	0.0
16	0.7	0.3	0.3	0.0	0.3	2.0	1.0	3.7	1.0
17	1.0	1.0	0.3	1.3	0.7	2.0	1.7	4.3	0.0
18	1.8	1.8	0.8	0.0	0.5	2.0	2.0	5.0	0.0
19	1.3	1.7	1.0	1.0	1.3	2.0	2.0	4.3	0.0
20	1.0	1.7	1.0	0.3	1.7	1.7	1.7	4.3	0.0

TABLE 6 (Continued)

Candidates	1	2	3	4	5	6	7	8	9
21	2.0	2.0	1.0	1.0	2.0	2.0	2.0	4.5	2.0
22	2.0	0.7	0.3	0.3	0.7	2.0	1.7	4.0	4.0
23	2.0	2.0	1.7	1.7	1.7	2.0	2.0	4.3	0.0
24	1.4	1.6	0.8	0.6	0.8	2.0	1.8	4.6	1.0
25	1.0	1.8	0.5	0.0	0.8	2.0	1.8	4.5	0.0
26	1.0	1.0	2.0	2.0	1.0	2.0	2.0	5.0	2.0
27	1.6	1.0	0.4	0.6	0.6	2.0	1.8	4.2	0.0
28	1.8	2.0	1.5	1.3	2.0	2.0	2.0	4.8	0.0
29	1.8	1.0	1.3	0.5	1.0	1.8	1.8	4.2	0.0
30	1.8	2.0	1.5	1.0	1.8	2.0	1.8	4.8	1.0
31	1.0	2.0	1.0	0.0	0.5	2.0	1.0	4.5	2.0
32	1.0	1.3	0.7	1.3	1.0	2.0	1.7	4.0	0.0
33	1.5	0.0	0.0	0.5	0.0	2.0	2.0	3.5	2.0
34	1.5	2.0	1.5	1.0	1.5	2.0	1.5	4.5	2.0
35	1.0	1.7	0.3	0.3	1.3	2.0	1.3	4.3	2.0
36	2.0	2.0	1.0	1.0	2.0	2.0	2.0	4.0	0.0
37	1.3	1.3	0.0	1.0	1.3	2.0	1.3	4.3	0.0
38	1.0	1.0	2.0	1.0	2.0	2.0	2.0	5.0	0.0
39	1.2	1.4	0.4	0.2	1.4	2.0	1.8	4.8	1.0
40	1.3	1.3	1.3	1.3	1.3	2.0	2.0	4.3	0.0
41	1.3	1.3	0.7	0.0	1.0	1.7	1.3	4.7	4.0
42	1.3	1.3	0.7	0.3	0.7	2.0	1.3	4.0	0.0
43	1.0	0.5	0.3	0.5	1.0	1.8	1.5	4.0	0.0
44	1.7	0.7	1.3	0.7	1.0	2.0	1.7	5.0	0.0
45	1.5	1.0	1.5	0.5	2.0	2.0	2.0	5.0	4.0

TABLE 6 (Continued)

Candidate	1	2	3	4	5	6	7	8	9
46	1.6	1.4	0.6	0.4	0.8	2.0	1.8	4.2	0.0
47	1.0	2.0	0.0	1.0	1.0	2.0	1.0	5.0	0.0
48	1.0	0.0	1.0	2.0	1.0	2.0	1.0	4.0	1.0
49	1.0	1.5	0.5	1.0	1.5	2.0	2.0	5.0	0.0
50	1.8	1.4	1.4	0.6	1.2	2.0	2.0	5.0	2.0
51	1.0	2.0	1.0	0.5	1.5	2.0	1.5	3.5	4.0
52	1.0	0.5	1.0	1.0	1.0	2.0	2.0	4.0	2.0
53	1.5	1.5	2.0	0.5	1.0	2.0	2.0	5.0	0.0
54	1.0	2.0	1.0	1.0	1.5	2.0	2.0	5.0	4.0
55	1.0	2.0	1.0	1.0	1.0	2.0	2.0	4.0	0.0
56	1.3	1.8	1.3	0.8	1.8	2.0	2.0	4.8	0.0
57	1.0	0.5	0.5	0.0	0.8	2.0	1.0	4.0	1.0
58	1.6	1.2	0.6	0.0	0.4	2.0	2.0	4.6	0.0
59	1.5	2.0	1.0	1.5	1.5	2.0	2.0	5.0	0.0
60	1.0	2.0	1.0	0.0	1.0	1.0	1.0	4.0	0.0
61	1.3	1.0	0.0	0.0	1.0	2.0	1.7	4.0	2.0
62	1.0	1.3	1.0	1.0	1.3	2.0	2.0	4.3	0.0
63	1.8	1.3	1.3	1.3	1.5	2.0	1.8	5.0	0.0
64	1.0	2.0	1.5	1.0	1.5	2.0	2.0	5.0	0.0
65	1.5	2.0	1.0	1.0	1.5	2.0	2.0	5.0	0.0
66	2.0	2.0	2.0	1.0	2.0	2.0	2.0	5.0	0.0
67	2.0	1.5	1.0	1.5	1.5	2.0	2.0	4.5	0.0
68	2.0	2.0	1.0	2.0	2.0	2.0	2.0	5.0	4.0
69	2.0	0.5	1.0	1.5	0.5	2.0	2.0	4.0	1.0
70	1.7	2.0	0.7	0.3	0.7	2.0	2.0	5.0	2.0

TABLE 6 (Continued)

Candidate	1	2	3	4	5	6	7	8	9
71	2.0	1.3	1.3	1.3	1.7	1.7	1.7	5.0	1.0
72	0.5	0.0	0.0	0.5	0.5	2.0	1.5	4.5	0.0
73	1.7	1.7	1.7	0.7	2.0	2.0	2.0	5.0	1.0
74	1.5	2.0	0.8	0.8	1.5	2.0	2.0	4.8	0.0
75	1.0	1.5	1.0	0.5	1.0	2.0	1.5	4.5	0.0
76	1.3	2.0	1.0	1.0	1.3	2.0	2.0	4.7	1.0
77	2.0	2.0	2.0	2.0	1.0	2.0	2.0	5.0	1.0
78	1.0	1.0	0.7	0.7	0.3	2.0	1.7	4.3	0.0
79	2.0	1.0	1.5	1.5	2.0	2.0	2.0	5.0	4.0
80	2.0	1.0	2.0	1.0	1.0	2.0	2.0	4.0	0.5
81	1.0	2.0	0.0	1.0	1.0	2.0	1.0	4.0	4.0
82	1.0	1.0	0.0	1.0	0.0	2.0	2.0	4.0	0.0
83	1.8	1.0	1.0	1.0	1.3	2.0	1.5	4.8	1.0
84	1.6	0.8	0.4	0.4	1.2	2.0	1.4	4.4	0.0
85	1.5	1.5	1.0	1.5	0.5	2.0	1.5	4.0	2.0
86	1.5	1.8	1.3	1.3	1.3	2.0	2.0	4.8	0.0
87	2.0	1.5	2.0	2.0	1.0	2.0	2.0	5.0	0.0
88	1.0	1.5	0.5	0.5	1.0	2.0	1.5	4.0	0.0
89	1.5	1.3	1.0	1.3	1.5	2.0	2.0	5.0	0.0
90	1.5	1.3	1.3	0.3	1.0	2.0	2.0	4.8	0.0
91	0.5	2.0	0.5	0.5	0.5	2.0	2.0	4.5	4.0
92	2.0	0.0	1.0	2.0	1.0	2.0	1.0	5.0	1.0
93	1.2	1.6	1.8	0.4	1.2	2.0	2.0	4.8	0.0
94	1.0	1.0	1.0	1.0	1.0	2.0	2.0	5.0	2.0
95	2.0	0.7	0.0	0.0	0.3	2.0	1.3	4.0	1.0

TABLE 6 (Continued)

Candidates	1	2	3	4	5	6	7	8	9
96	1.2	1.6	0.6	1.0	1.2	2.0	1.6	4.6	0.0
97	1.3	1.0	1.0	1.3	1.5	1.8	2.0	4.8	0.0
98	1.4	1.0	0.6	0.4	0.8	2.0	1.8	4.2	0.0
99	1.7	2.0	1.7	1.7	1.7	2.0	2.0	5.0	1.0
100	1.7	0.7	0.7	1.0	0.3	2.0	1.3	4.3	4.0
Total	142.7	137.6	95.4	84.3	113.3	197.4	173.2	450.4	99.5
Average	1.43	1.38	0.95	0.84	1.13	1.97	1.73	4.50	1.00

*See ITEMS CODE on page 76.

TABLE 7

AVERAGE RATINGS OF UNSUCCESSFUL CANDIDATES ON ITEMS INCLUDED IN THE STUDY

Candidates	1*	2	3	4	5	6	7	8	9
101	0.3	0.3	1.5	0.2	0.5	1.8	1.0	3.8	0.0
102	1.0	1.5	0.0	0.0	1.0	2.0	2.0	4.0	0.5
103	1.8	1.3	1.0	1.0	1.4	2.0	1.5	4.5	2.0
104	1.3	1.8	0.8	0.3	1.0	1.8	1.5	4.5	0.0
105	1.0	2.0	0.5	1.5	0.5	1.5	1.5	4.0	0.0
106	2.0	1.5	1.5	1.5	0.5	2.0	1.5	5.0	0.0
107	2.0	2.0	2.0	0.0	2.0	2.0	2.0	5.0	4.0
108	1.4	1.3	0.6	0.8	0.9	1.9	1.6	4.1	1.0
109	1.2	1.7	0.7	1.0	0.8	2.0	1.5	4.5	0.0
110	2.0	1.7	1.3	0.7	1.3	2.0	2.0	4.0	1.0
111	1.3	0.8	0.8	0.2	0.6	1.9	1.7	3.8	0.0
112	2.0	2.0	1.0	0.0	1.0	2.0	2.0	5.0	1.0
113	1.6	0.9	0.6	1.1	1.7	2.0	2.0	4.4	0.0
114	1.0	2.0	1.0	1.0	2.0	2.0	2.0	4.0	0.0
115	2.0	1.0	1.0	2.0	2.0	2.0	2.0	4.0	0.0
116	1.0	1.7	1.0	0.3	0.7	1.7	1.7	4.0	0.0
117	0.5	1.5	1.0	0.0	1.0	1.5	1.5	3.5	0.0
118	2.0	1.0	2.0	2.0	1.0	2.0	1.0	4.0	3.0
119	1.3	0.7	0.7	0.3	0.7	2.0	1.7	4.3	0.0
120	1.0	1.5	0.5	1.0	0.3	1.8	1.5	4.8	0.0

TABLE 7 (Continued)

Candidates	1	2	3	4	5	6	7	8	9
121	1.0	1.5	1.0	0.5	0.5	2.0	2.0	4.0	0.0
122	1.2	1.2	0.4	0.2	0.6	2.0	1.8	4.4	0.0
123	1.3	1.7	0.8	0.2	0.8	2.0	1.8	4.0	0.0
124	1.0	1.3	1.0	0.3	0.7	2.0	1.7	4.3	0.0
125	2.0	2.0	1.0	1.5	0.5	2.0	2.0	4.5	0.0
126	1.0	1.0	0.3	0.8	1.3	2.0	1.3	3.5	1.0
127	2.0	0.5	0.5	1.5	0.5	2.0	1.0	4.5	0.0
128	1.1	1.3	0.6	0.7	1.0	1.7	1.4	3.7	2.0
129	1.0	1.5	1.0	0.0	1.0	2.0	2.0	5.0	2.0
130	2.0	1.5	0.8	0.0	0.3	2.0	2.0	5.0	0.0
131	1.0	1.5	1.0	1.0	2.0	2.0	1.0	4.5	0.0
132	2.0	2.0	1.0	2.0	2.0	2.0	2.0	5.0	4.0
133	1.3	1.0	0.7	0.3	0.7	2.0	1.7	3.7	1.0
134	1.3	1.7	0.3	0.0	0.3	2.0	1.7	3.7	0.0
135	1.0	1.3	0.3	1.0	1.0	2.0	1.3	4.0	0.0
136	1.0	2.0	0.0	0.0	0.0	2.0	2.0	3.0	4.0
137	1.3	1.3	0.5	0.3	0.8	2.0	1.8	2.8	0.0
138	2.0	1.3	0.7	0.3	0.7	2.0	2.0	4.7	0.0
139	1.0	0.3	0.0	0.0	0.7	2.0	0.7	4.0	0.0
140	2.0	2.0	2.0	0.0	1.0	2.0	2.0	5.0	0.0
141	1.0	2.0	1.0	0.0	1.0	2.0	1.0	4.0	0.0
142	1.8	1.5	1.0	0.8	1.5	2.0	1.5	4.3	0.5
143	0.7	1.0	0.0	0.3	0.0	2.0	1.3	4.0	0.0
144	2.0	2.0	1.5	1.0	1.0	2.0	2.0	4.5	0.0
145	1.0	1.0	1.0	1.0	2.0	2.0	2.0	4.0	0.0

TABLE 7 (Continued)

Candidates	1	2	3	4	5	6	7	8	9
146	1.3	1.7	1.0	1.0	1.7	2.0	2.0	4.3	0.0
147	2.0	1.0	0.5	1.5	1.0	2.0	1.5	4.0	0.5
148	1.3	1.4	0.8	0.3	1.0	1.9	1.4	4.3	0.0
149	2.0	0.0	0.5	0.0	0.5	2.0	2.0	4.0	0.0
150	0.8	0.3	0.5	0.5	0.3	1.8	1.5	3.5	0.0
151	2.0	2.0	1.0	1.0	0.0	2.0	2.0	5.0	0.0
152	1.0	1.0	0.0	1.0	0.0	2.0	2.0	4.0	0.5
153	2.0	2.0	1.5	1.5	2.0	2.0	2.0	5.0	0.0
154	1.0	1.0	0.0	0.0	1.0	2.0	1.0	4.0	0.0
155	1.0	0.0	1.0	1.0	1.0	1.0	1.0	5.0	5.0
156	0.7	1.3	0.3	0.3	1.0	2.0	2.0	4.0	0.0
157	2.0	1.3	1.0	1.0	1.7	2.0	2.0	5.0	0.0
158	2.0	2.0	1.0	0.5	1.5	2.0	2.0	4.0	2.0
159	1.0	2.0	1.0	2.0	2.0	2.0	2.0	5.0	0.0
160	2.0	1.0	0.5	0.5	0.5	2.0	1.5	5.0	0.0
161	1.6	1.8	2.0	1.4	1.6	2.0	2.0	4.6	0.0
162	1.3	1.3	0.3	0.3	0.7	2.0	1.3	4.7	0.0
163	1.0	1.0	0.5	1.0	1.5	2.0	2.0	4.0	0.0
164	1.0	1.0	0.7	0.3	1.3	2.0	2.0	3.7	0.0
165	1.0	1.0	1.0	0.0	0.0	1.0	1.0	3.0	4.0
166	1.0	1.5	0.5	0.0	1.0	2.0	1.5	3.5	0.5
167	1.6	1.3	1.1	0.9	1.0	1.9	1.9	4.9	0.5
168	1.5	1.5	1.0	0.5	1.0	2.0	2.0	4.5	2.0
169	1.0	2.0	2.0	1.0	2.0	2.0	2.0	5.0	0.0
170	0.5	2.0	1.0	1.0	2.0	2.0	1.5	4.0	0.0

TABLE 7 (Continued)

Candidates	1	2	3	4	5	6	7	8	9
171	1.5	2.0	0.5	0.0	2.0	2.0	2.0	3.5	1.0
172	1.7	0.7	1.0	0.3	0.7	2.0	1.3	4.3	2.0
173	1.0	1.0	1.0	0.0	1.0	2.0	1.0	3.0	4.0
174	1.5	1.0	0.0	0.8	0.8	2.0	1.8	5.0	0.0
175	2.0	1.5	1.0	0.5	1.5	2.0	2.0	4.5	0.0
176	0.1	0.9	0.0	0.0	0.8	2.0	1.4	3.0	0.0
177	1.5	1.0	0.3	0.0	0.3	1.8	1.5	3.5	0.0
178	1.0	1.0	0.3	0.0	0.7	1.3	1.0	3.7	0.0
179	1.0	2.0	1.0	0.0	1.0	2.0	2.0	5.0	0.0
180	1.3	1.7	1.0	1.0	1.3	2.0	2.0	4.0	0.0
181	1.3	1.7	1.0	1.7	1.7	1.7	1.3	5.0	0.0
182	1.0	1.2	0.5	0.3	1.8	2.0	2.0	3.7	0.0
183	1.8	1.0	1.0	1.0	1.3	1.8	1.5	4.8	1.0
184	1.7	1.0	1.3	0.7	1.3	2.0	2.0	4.3	0.0
185	1.0	1.0	0.7	1.3	0.7	2.0	1.7	3.7	0.0
186	1.3	1.3	0.7	0.7	1.3	2.0	2.0	4.7	4.0
187	1.0	1.0	0.0	0.0	2.0	1.0	2.0	4.0	1.0
188	2.0	1.0	1.0	1.0	0.0	2.0	1.0	5.0	1.0
189	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	0.0
190	1.5	2.0	1.0	0.0	1.0	2.0	1.5	3.0	0.0
191	1.7	1.3	1.7	1.3	2.0	2.0	1.0	4.7	0.0
192	1.0	1.0	0.0	0.0	0.0	2.0	1.0	5.0	2.0
193	1.7	1.3	1.3	1.7	1.7	2.0	2.0	5.0	1.0
194	1.3	0.7	0.3	0.3	0.3	2.0	2.0	4.3	0.0
195	1.0	0.5	0.5	0.5	0.0	1.0	1.0	3.5	0.0

TABLE 7 (Conclusions)

Candidates	1	2	3	4	5	6	7	8	9
196	1.0	2.0	1.0	0.0	1.0	2.0	2.0	4.0	0.0
197	1.3	1.5	1.3	0.5	1.3	2.0	1.8	4.0	3.0
198	1.0	0.7	0.3	0.0	0.7	1.3	1.3	4.0	1.0
199	1.0	1.4	0.8	0.4	1.0	2.0	1.6	4.4	0.0
200	1.5	1.5	1.5	2.0	1.0	2.0	2.0	4.0	0.0
Total	135.7	131.9	81.4	65.1	102.3	191.1	166.0	424.0	64.0
Average	1.36	1.32	0.81	0.65	1.02	1.91	1.66	4.24	0.64

*See ITEMS CODE on page 76.

ITEMS CODE

1--Frequency of performance of the duty of originating written communications.

2--Frequency of performance of the duty of making travel arrangements.

3--Frequency of performance of the duty of gathering research material for reports and/or speeches.

4--Frequency of performance of the duty of supervising other employees.

5--Frequency of performance of the duty of preparing for meetings and keeping notes and minutes at meetings.

6--Frequency of performance of the duty of receiving and placing telephone calls.

7--Frequency of performance of the duty of obtaining information from and supplying information to other offices.

8--Employers' overall ratings.

9--Educational level.

APPENDIX B

TABLE 8

CALCULATION OF T-SCORES*

	1+	2	3	4	5	6	7	8	9
$\bar{X}_1$	1.430	1.380	0.950	0.840	1.130	1.970	1.730	4.500	1.000
$\bar{X}_2$	1.360	1.320	0.810	0.650	1.020	1.910	1.660	4.240	0.640
s_1	0.394	0.562	0.535	0.541	0.518	0.116	0.335	0.414	1.350
s_2	0.448	0.500	0.500	0.600	0.584	0.230	0.373	0.556	1.188
s_1^2	0.155	0.316	0.287	0.293	0.268	0.013	0.112	0.172	1.821
s_2^2	0.200	0.245	0.245	0.358	0.341	0.053	0.139	0.310	1.412
s_p^2	0.178	0.281	0.266	0.326	0.305	0.033	0.126	0.241	1.617
$s_{\bar{d}}$	0.060	0.075	0.073	0.081	0.078	0.026	0.050	0.694	0.180
t	1.167	0.800	1.918	2.346	1.410	2.308	1.400	0.375	2.000

*$t = \dfrac{\bar{X}_1 - \bar{X}_2}{s_{\bar{d}}}$

+See ITEMS CODE on page 79.

ITEMS CODE

1--Frequency of performance of the duty of originating written communications.

2--Frequency of performance of the duty of making travel arrangements.

3--Frequency of performance of the duty of gathering research material for reports and/or speeches.

4--Frequency of performance of the duty of supervising other employees.

5--Frequency of performance of the duty of preparing for meetings and keeping notes and minutes at meetings.

6--Frequency of performance of the duty of receiving and placing telephone calls.

7--Frequency of performance of the duty of obtaining information from and supplying information to other offices.

8--Employers' overall ratings.

9--Educational level.

APPENDIX C

STATEMENTS SUPPORTING DUTIES PERFORMED BY
HIGH-RANKING SECRETARIES

Company 1

*A--Take and transcribe regular and confidential dictation.+
C--Maintain personal and bank related files.
D--Open, sort, and answer routine mail.
E--Schedule appointments.
F--Answer routine mail.
M--Maintain financial records.
O--Provide guidance for various bank employees.
P--Schedule bank meetings. Take, transcribe, and distribute dictation of Senior Officer minutes.
R--Screen telephone calls.
S--Handle inquiries and provide guidance for various bank employees as well as customers on a variety of bank activities.

Company 2

C--Performs all secretarial duties such as . . . maintaining files . . .
D--Performs all secretarial duties such as handling incoming mail; outgoing correspondence . . .
E--Performs all secretarial duties such as . . . appointments . . .
F--Performs all secretarial duties such as . . . initiating correspondence.
I--Performs all secretarial duties such as . . . making travel arrangements . . .
K--Gather confidential information and prepare reports.
M--Performs all secretarial duties such as . . . keeping record of travel expenses . . .
O--In absence of senior vice president, receives information, answers questions, makes assignments and follows through on routine matters.
P--Take minutes of departmental communications meetings, as well as gather and prepare data and reports used during these meetings.
R--Monitors all telephone calls.
S--Acts as liaison between senior vice president and subordinates with regard to receiving information, giving answers . . .

Company 3

A--Take dictation and transcribe.
C--File.
D--Process all incoming and outgoing mail.
E--Schedule appointments and meetings.

I--Make travel arrangements, including plane and hotel reservations, both domestic and international.
M--Maintain records. Keep records of expenses.
P--Be responsible for arranging meetings.
R--Answer phones, place calls throughout the world, take and deliver messages.

Company 4

A--Take and transcribe dictation, of any degree of difficulty.
C--Set up and maintain office files.
D--Review incoming material and . . . review outgoing material.
E--Maintain supervisor's calendar. Make appointments for him.
F--Prepare correspondence of a general nature. May release routine material on own initiative.
G--Receive telephone and personal callers to the office, answer routine inquiries.
I--Make travel arrangements for supervisor and others on his staff as required.
K--Handle special assignments such as searching for and compiling information for supervisor's use in preparing speeches, articles, and reports.
L--Prepare periodical reports of a statistical or narrative nature involving review of records and compilation of information.
O--May direct the work of or supervise clerical employees at lower grades.
P--Make arrangements for conferences--attend conference to take notes.
R--Monitor telephone conversations, record pertinent information and on own initiative follow through on matters arising out of such conversation.
S--Relay messages and instructions from supervisor to his staff. Keep them informed. Answer routine inquiries.

Company 5

C--Setting up and maintaining filing system.
E--Sets up appointments.
F--Verifies employment verbally and in writing. Answers written and telephone references. Verifies . . . and prepares letter for approval.
G--Display patience, courtesy, and tact in contacts with employees, supervisors, and outsiders.
K--Data collection.
L--Completion of reports.
M--Maintains records.
P--Sets up meetings.
Q--Operates microfilm reader, copy machine . . .

R--Screens all personnel calls.
S--Answers employees, department heads, and supervisor's questions related to personnel. Distributes employee hand-outs.

Company 6

D--Directs communication to other officials for their action. Screens all incoming correspondence.
E--Scheduling of appointments.
F--Composes correspondence and reports requiring decisions.
I--Makes travel arrangements.
K--Gathers information. Compiles data.
L--May draft financial, statistical and narrative reports. Composes correspondence and reports requiring decisions.
M--Maintains records involving grants, contracts or appropriations.
O--May make work assignments and review the work of designated employees.
P--Arranges and participates in conferences and meetings; recommends agenda items.
R--Handles long distance telephone calls.
S--Provides authoritative information.

Company 7

A--Takes dictation and types correspondence.
B--Transcribes machine dictation.
C--Maintains various files.
D--Opens and sorts mail calling attention to matters requiring immediate attention. In supervisor's absence ensures that important correspondence is handled or forwarded to appropriate personnel. Maintains annual report mailing list, types envelopes and mails reports.
I--Makes travel and hotel reservations for division personnel and visitors as requested.
K--Gathering data.
L--Analyzes 711 forms and compiles data.
M--Maintains expense and vacation records.
P--Assists with preparation and presentation of annual Engineering Workshop.
R--Handles and places phone calls.

Company 8

A--Takes, transcribes dictation and prepares correspondence.
C--Maintains files.
D--Picks up mail at least twice daily. Sorts, distributes and scans.
E--Makes appointments in supervisors' absence, arranges itineraries and schedules.

F--Composes non-routine correspondence.
G--Receives visitors.
I--Arranges lodging and flight reservations.
K--Searches out, collects and assembles data for a number of special projects and reports.
L--Prepares visual aids and written reports.
M--Handles confidential and restricted information concerning operations plans, goals, objectives, costs, performance, personnel, salaries, . . .
P--Preparation and distribution of Operations Manager's staff meeting minutes. Arranges luncheons and dinners.
Q--Uses a variety of layout, reproduction and artistic techniques.
R--Answers telephones and interrupts meetings to relay messages when appropriate.
S--Communicates with new hires answering their questions, securing information for them, relaying messages between them and recruiting contacts.

Company 9

A--Takes dictation of correspondence, reports, orders, conferences, and transcribes the dictated material with a high degree of accuracy.
C--Handle other specialized clerical work, such as setting up and maintaining confidential files and records.
D--Perform such duties as opening and determining proper disposition of mail . . .
E--. . . scheduling appointments . . .
F--Write and answer some correspondence.
G--. . . receiving visitors . . .
I--Makes and confirms travel reservations.
K--. . . doing reference work from a wide variety of sources, both in and outside the company . . .
L--. . . preparing special reports . . .
M--Handle other specialized clerical work, such as setting up and maintaining files and records.
O--May supervise, direct, and train a small group of stenographic or clerical employees.
P--Takes dictation of . . . conferences, and transcribes . . . Makes plans for meetings and conferences.
S--Doing reference work from a wide variety of sources, both in and outside the company.

Company 10

A--Take dictation.
B--Types . . . from tapes, shorthand, or handwritten copy.
C--Maintains accurate confidential files.
D--Sorts the mail by reviewing for content and taking appropriate action as indicated for Vice President.

F--Composes routine letters.
G--Greets and directs visitors.
I--Coordinate travel plans, approvals and advances for department.
K--Maintains reference sources for area.
Q--Type ans Xerox all correspondence, reports, policies and procedures, and periodic reports for the Vice President.
R--Screen phone calls, intercept and route problems and complaints to appropriate personnel.
S--Relay information.

*See descriptors of duties on page 39.

+All job duty descriptions are stated as they were stated on the job descriptions.

APPENDIX D

EXPERIENCED SECRETARY

APPLICATION TO TAKE THE CERTIFIED PROFESSIONAL SECRETARY® EXAMINATION

(STUDENT APPLICANT COMPLETE THE REVERSE SIDE OF THIS FORM)

APPLICANTS NAME AND MAILING ADDRESS (13) ID: NSA Member Only – Nonmember OMIT _____

FIRST _____ LAST _____

Street _____

Street _____

USA 1 CITY _____ ST _____ ZIP _____

CANADA 2 CITY _____ PR _____ PCD _____

FOREIGN 3 COUNTRY _____ UPU/ PUAS _____

INSTRUCTIONS

The following items must be returned by DECEMBER 1 to be considered for the examination the following spring:

1. This Application (Form Q-1) legibly completed, except for blanks marked OMIT. If pertinent information is omitted, all forms may be returned to you.
2. Proof of college education: i.e., transcript of credits, or a copy of degree, diploma, or certificate.
3. A Job Reference Sheet (Form Q-2) covering each position held as a secretary.
   a. Include ALL secretarial experience and names of immediate supervisors, giving their current addresses. Be sure to include zip codes.
   b. Only actual experience verified by employers will be evaluated.
   c. No experience prior to 25 years will be accepted.
   d. No period of less than three months of continuous employment will be counted.
4. Processing Fee of $15 for NSA® members, $30 for nonmembers (NOT REFUNDABLE). Do NOT send currency. NSA® members MUST indicate membership I.D. number above.

NOTE: If you have taken the CPS® Examination, within the past five years, do NOT resubmit this Form Q-1. Request the proper registration form from the Institute.

EXPERIENCE WILL BE COMPUTED THROUGH DECEMBER 31

C P S

DATE AND AMOUNT RECEIVED (OMIT)

(OMIT)	YRS.
Education	
Experience: Required	
Verified	
Committee Action	
Year	

EDUCATION (PLEASE FILL IN COMPLETE INFORMATION)

HIGH SCHOOL AND ADDRESS

DIPLOMA: YES NO

If no, how many years of high school completed? _____

If application has been made before, give name under which you applied and date:

NAME _____

DATE _____

I agree that all examination materials, answers and scores are the exclusive property of The National Secretaries Association (International)®. I also agree to accept the scores as reported by the Institute for Certifying Secretaries, a department of NSA®, as final. I understand that any material misstatement in connection with this application will automatically void it.

Applicant's Signature _____

Date _____ PHONE BUS. _____ RES. _____

APPLY EARLY: then you have a far better chance of having your experience verified by the deadline date for advising candidates of acceptance for the examination.

DEADLINE DATES

Application ..... December 1

Examination fee ..... January 15 or 15 days after receipt of approval letter, whichever comes later.

PROCESSING FEE PAYABLE TO:
The National Secretaries Association (International)®
must be enclosed with this application and mailed to:

The National Secretaries Association (International)®
2440 Pershing Road, Suite G10
Kansas City, MO 64108

FORM Q-1 Revised 7-78

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CPS® Capstone 78/7

APPENDIX E

JOB REFERENCE SHEET

To: Committee on Qualifications
Institute for Certifying Secretaries, NSA
2440 Pershing Road, Suite G10
Kansas City, MO 64108

Make sufficient photocopies of this form to meet requirements detailed below

To the best of my ability, I am listing below pertinent information regarding my secretarial experience with the individual and company indicated. If I have worked for more than one person in the same firm, I am enclosing a Job Reference Sheet for each individual. If I have made an error, it is not intentional, and I ask that the facts shown by company records be accepted. I understand that information furnished you by my employer will be confidential. It is agreed that it will be a courtesy for me to alert my employer that an inquiry will be received from the Institute.

DESIRED INFORMATION	APPLICANT'S STATEMENTS (PLEASE TYPE. USE REVERSE SIDE IF NECESSARY.)
1. Legal name and current address of applicant:	
2. Employed under name of:	
3. Name and complete address of firm where employed:	
4. Name and current address of person for whom you worked as a secretary: Enclose Job Reference Sheet for each individual.	
5. Period employed as secretary for # 4 above (month, day, and year of both employment and termination):	
6. Indicate whether employment was full-time or part-time. If part-time, how many hours did you work per week?	
7. Reason for termination of employment, if it is not current:	
8. Your title, nature of work performed, and brief description of duties. If a Federal Government employee, show classification (GS-3, etc.). Use reverse side if more space is needed.	
9. Additional information which would assist the Committee in determining your eligibility.	

Note: If you had Federal Government or other Civil Service employment, or if one of your employers is deceased, please read the instructions on the reverse side.

(DATE SIGNED) (SIGNATURE OF APPLICANT)

FORM Q-2 (REV. 7-78) CPS® Capstone 78/9

Continuation of APPLICANT'S STATEMENTS

INSTRUCTIONS FOR FEDERAL GOVERNMENT AND OTHER CIVIL SERVICE EMPLOYEES

Federal Government Service:

GS-1 and GS-2	Do NOT list since the Institute has ruled that such service cannot be considered as secretarial.
GS-3 and GS-4	Submit a Job Reference Sheet covering such service, giving the employer's name and current address. Such service cannot be verified by the Federal Services Administration, or by any other agency of the Federal Government.
GS-5 and higher	If former employers cannot be located, please file the following: (1) Certified copy of Job Description and (2) Certified Personnel Action Form or Certification of Length of Service.

Other Civil Service Employment:

A Job Reference Sheet should be submitted for each person for whom you have worked as a secretary. If you cannot locate a former employer, submit a Job Description certified by a supervisor, department head, or another person in authority.

INSTRUCTIONS FOR APPLICANTS WITH DECEASED EMPLOYERS

If a former employer is deceased, his name should be shown in item 4. Also list the name and current address of another person who was also employed in the office in an official capacity who can verify the secretarial duties you performed.

VITA

Susan Kay Williams Armontrout was born in Knoxville, Tennessee, on March 13, 1957. She was graduated with honors from Brookville High School in June, 1975.

During her attendance at Central Virginia Community College and the summer following her graduation, she was employed first as a secretarial assistant and then as a secretary by the college and was an active member in Phi Beta Lambda and chapter secretary for Phi Theta Kappa. She was awarded the Associate of Applied Science Degree in Secretarial Science at CVCC in June, 1977, and graduated Magna Cum Laude.

During her entire period of attendance at Longwood College in Farmville, Virginia, she was employed as a secretary by the college. During one year of her attendance there she was also employed as an assistant to a business instructor at the college, and during one semester she conducted an adult typing class at Appomattox County High School in Appomattox, Virginia. She was an active member, secretary, and acting president (for one semester) for the Delta Rho chapter of Pi Omega Pi. She graduated Cum Laude from Longwood College in May, 1979, with a Bachelor of Science Degree in Business Education.

In June, 1979, she became employed on a full-time basis by Appomattox County High School as a business teacher and continued that employment until June, 1980. She was also employed as a business teacher by Central Virginia Community College on a part-time basis from September, 1979, through July, 1980.

In September, 1980, she enrolled in a Master's program at The University of Tennessee where she was awarded a graduate teaching assistantship. She received her Master's degree in Business Education from The University of Tennessee in December, 1981.

She is married to Brian Alden Armontrout of Lynchburg, Virginia.